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Mac ADDICT 15

NOV/97

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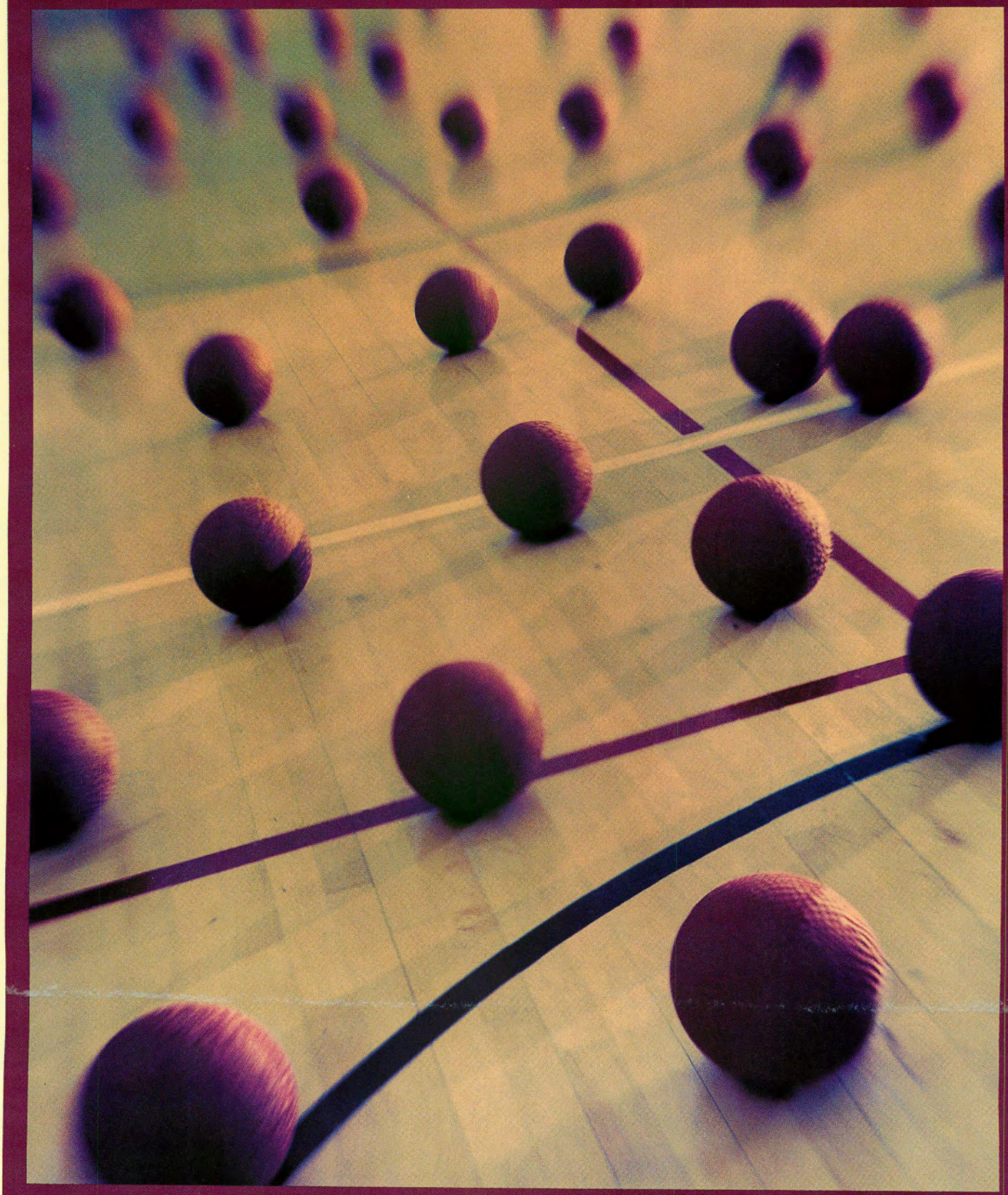

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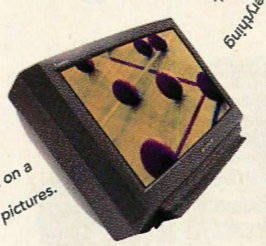

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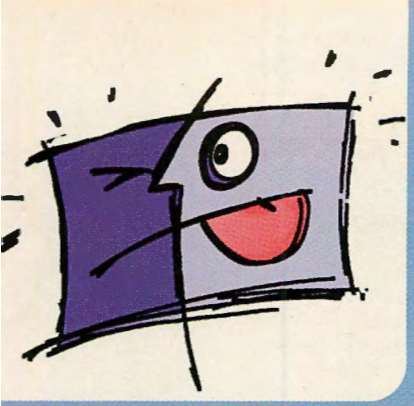


Must...stop...playing...with...Mac... need...to...go...to...bathroom....

NOVEMBER 1997

Mac ADDICT 15

highlights

38 The Mac's Hidden Secrets Revealed
We're spilling the beans, all of them, on the Mac. Follow along with us on an exclusive, never-before-published tour of Apple's quality-testing labs, take our trivia-filled technology quiz, get the scoop on 20 Mac code names, and snoop out the best Easter eggs. **BY NIKKI ECHLER**

50 Hook Up Your Macs With Superfast Ethernet
Learn how to put your Macs on a network that's faster than AppleTalk, just by following our step-by-step guide to setting up an Ethernet network. **BY DAVID REYNOLDS**

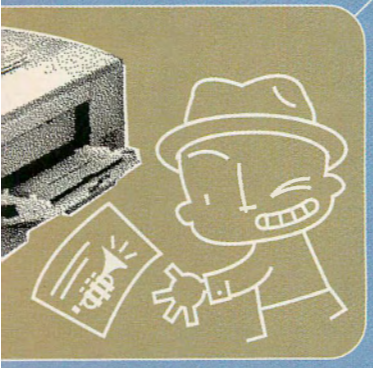
54 System, System, Who's Got My System?
They're faster, they're bigger, they're cheaper, they're better. Today's Macs are pretty darn irresistible. But which one is exactly right for you? **BY D. D. TURNER**

60 MacUser R.I.P.
After 12 years in print, *MacUser* merges into *Macworld,* leaving behind a whole host of memories. **BY CHERYL ENGLAND**

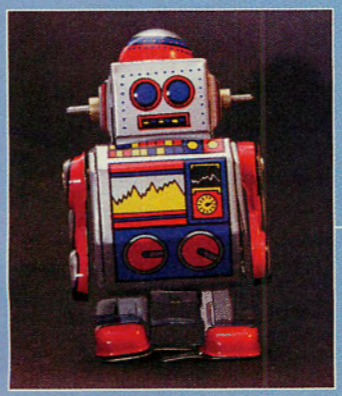
OK, so she had to leave, but did she have to take my MAC?!?!

how to

88 Create a Web Animation
If your Web site seems just a little static, check out this month's tutorial on creating a viewer-friendly GIF animation. It's easy, it's fun, and, most important, it's impressive.



I need that printout, see, so hand it over real nice-like and nobody gets hurt.



We're off to see the Wizard, the wonderful Wizard of Oz! (Actually, we're just off.)

The Apple of Our Eye was created by Ken Bousquet, who found that a 100mm macro lens and a Nikon LS 1000 film scanner are excellent input devices.

Hey, Smiles, you've got a big chunk of green lettuce stuck between your front teeth. Thank me later.

Who went crazy with the ugly stick, huh?

every month

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What teenage boys and Mac addicts have in common.

8 Letters
Wacky, weird, and occasionally useful. Yep, those are the types of letters that fill our mailbag every day.

28 Get Info
Find out what Steve Jobs has been up to lately, and how his Reality Distortion Field *really* works. Plus four handy utilities, another contest, and more!

36 Cravings
Oh man! How cool! We just can't wait to rip open the boxes to get our grubby paws on these products. You'll feel the same.

64 Reviews
Must be gift-giving season! We've got seriously good games: Civilization II, Quake, and TIE Fighter. Plus Kai's PhotoSoap, Private File, and fast modems.

92 Ask Us
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94 PowerPlay
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120 Shut Down
Ha ha. Ha ha ha. Ha ha ha ha. And other laughs.

the disc

14 Want to waste your day checking out Mac Easter eggs? Here's your chance with Daniel Fanton's ultimate Easter egg database, replete with more than 250 eggs plus more sub-eggs and stories behind the eggs. Find that and a top-notch assortment of demos and shareware on The Disc.

the web site

22 Thank goodness that the Internet gives you unlimited space. We've got a whole bunch of great stuff ready and waiting for you: our special ammo site and Mac OS 8 site, archives of past reviews and This Old Mac articles, links to other hot Mac sites, and our daily dose of news and events.

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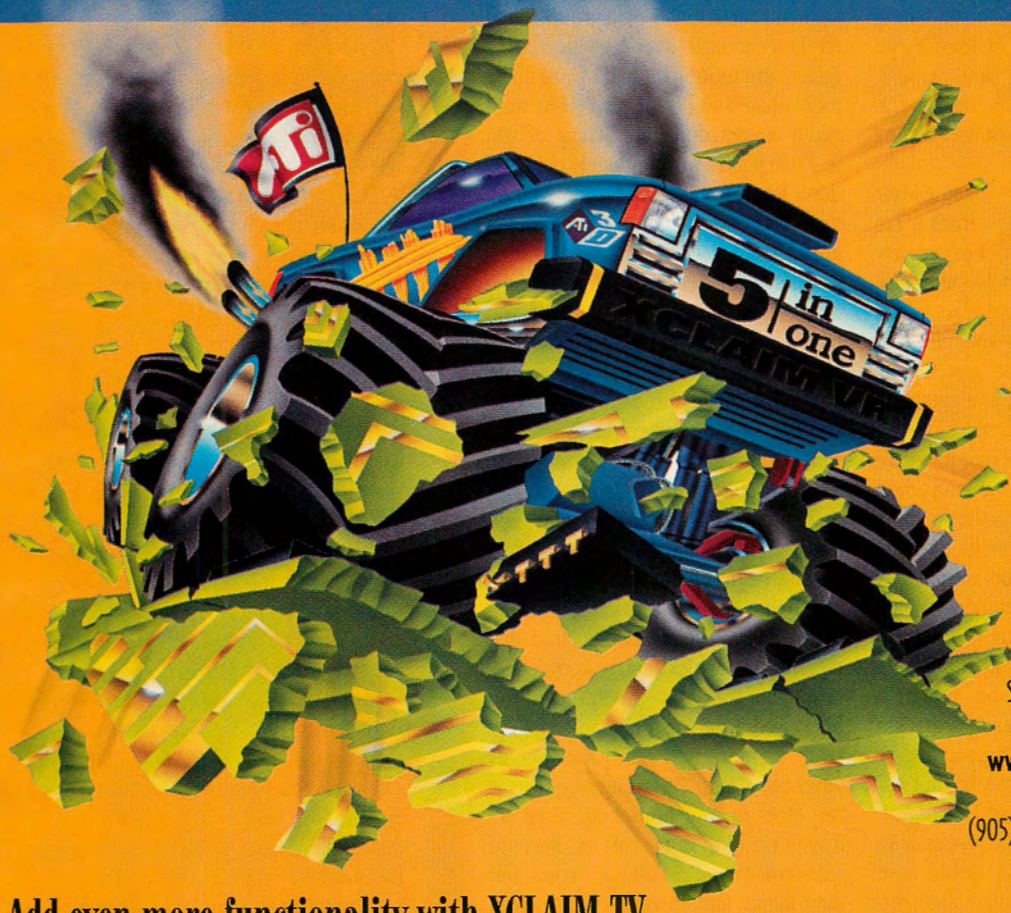

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editor's note

MacAddict readers are intelligent, capable people—but you knew that.

"All right, I've broken down and subscribed, even though your magazine seems to be for teenage boys, and I'm the wrong sex, and 25 years too old. At least I can understand the information you present. Now, how about some nice articles on shopping, gardening, and housekeeping stuff on the Net!"

I'm always surprised when I get a letter like this one from Jan Dorenfeld. I mean, I'm certainly not a teenage boy—and also like Jan, I'm several years (OK, a bunch of years) too old. Yet, together with the rest of the *MacAddict* team, I've created a magazine on Macintosh computers that I personally have wanted to read for a long time.

Maybe that says something about my tastes (something that I'd rather not confront), but more likely it says something about the people who pick the Macintosh as their computer of choice. The stereotype of the Macintosh addict as a fun-loving, casual, irreverent sort of person might not be far from wrong. And that's a stereotype that I don't mind perpetuating.

A while ago, we ran a survey to find out more about you, the readers of *MacAddict*. We were a little surprised by the results. Like Jan Dorenfeld, we thought we would have attracted a slightly younger audience (although a bit older than high school age) than would a more serious, staid magazine such as *Macworld*. Yet, we found that more than half of you are between the ages of 35 and 54; for those of you under 18 or over 65, the numbers drop dramatically. It wasn't any surprise to us that most of you are male, although we didn't expect such a heavy bias—more than 80 percent. (Either that, or the women among you don't like to fill out surveys!)

Mac addicts are certainly not ignorant, ill-informed, or blissfully out of touch.

We found out a lot more, too. For example, you people are a pretty darn well-educated, highly paid group. Some 64 percent have a college degree or better, and more than half of you make more than $60,000 a year. (Uh, we'll gladly accept donations if any of you feel that you're just too highly paid and don't know exactly what to do with all that extra cash.) And, yes, most of you are married, with kids.

And here's a bit of good news for the Mac—more than 70 percent of you have some involvement with the purchase of computers for your office. Now, granted, a lot of you probably have to contend with the others in your office who also have purchasing authority and who, most likely, are PC dudes. But, hey, one lone voice is better than none, and based on the letters we receive, it occasionally results in the Mac being kept or added into an organization.

We were also pleased to find that most of you are extremely knowledgeable about your Mac. Nearly half of you have used a personal computer for 10 years or more and rate yourselves as advanced users. On average, you have two Macs in your household. Even so, if you're like those of us here at *MacAddict,* you're always trying out new things and learning more about your Mac. It's good to know that, on a Mac at least, an advanced-user status doesn't equal a know-it-all attitude.

No one, of course, fits this profile perfectly. For example, I'm the right age but the wrong gender. I've used Macs for more than 10 years, but I currently have only one Mac at home. I have a four-year college degree but no husband or kids.

Still, all of these statistics are comforting, if only because it indicates that Mac addicts are certainly not ignorant, ill-informed, or blissfully out of touch with reality, nor are they all teenage boys. Instead, as a group, we're pretty responsible adults, albeit ones with a sense of humor. And I thank you for that. —*Cheryl England*

The Company We Hate to Love

So, here it is, two days after Apple announced its purchase of Power Computing's key assets, effectively driving the leading clone vendor out of the market. And I'm still mad at Apple. So mad, in fact, that I couldn't bring myself to write the main part of my Editor's Note about the implications of the deal.

Why? Well, because it would have been a cranky note, an angry note, a not-too-cheerful note. And it might have been a wrong note.

You see, I've been using Macs for more than a decade and have followed Apple for at least that long. And every so often, the company just starts to seem like it is hell-bent on destroying itself. In the end, it survives—and it has even thrived at various times in its history. But it is those times of seeming self-destruction that make me crazy.

Let me be very clear here: My current feelings are a strictly emotional response. Perhaps if I could think clearly and logically at the moment—Spock-like—about Apple driving Power Computer out of the Macintosh clone business, I might come to the conclusion that it is a smart business move for Apple. I might conclude that this is the move that could save Apple and, indeed, start it down a hugely successful comeback path.

But I can't think about that now. I'm still too angry. And there's more to come. As I write this, it's not clear what sort of licensing deal Apple will strike up with UMAX and Motorola. I hope it's a friendly one, one that's good for all. In the case of UMAX, that might just happen; but in the case of Motorola, I'm not nearly as confident.

By the time you read this, a lot of the licensing fervor will have died down. A lot more will be resolved and tempers will have cooled—at least somewhat. Even so, this is one of those moments in Apple's history that I'll remember for a long, long time.

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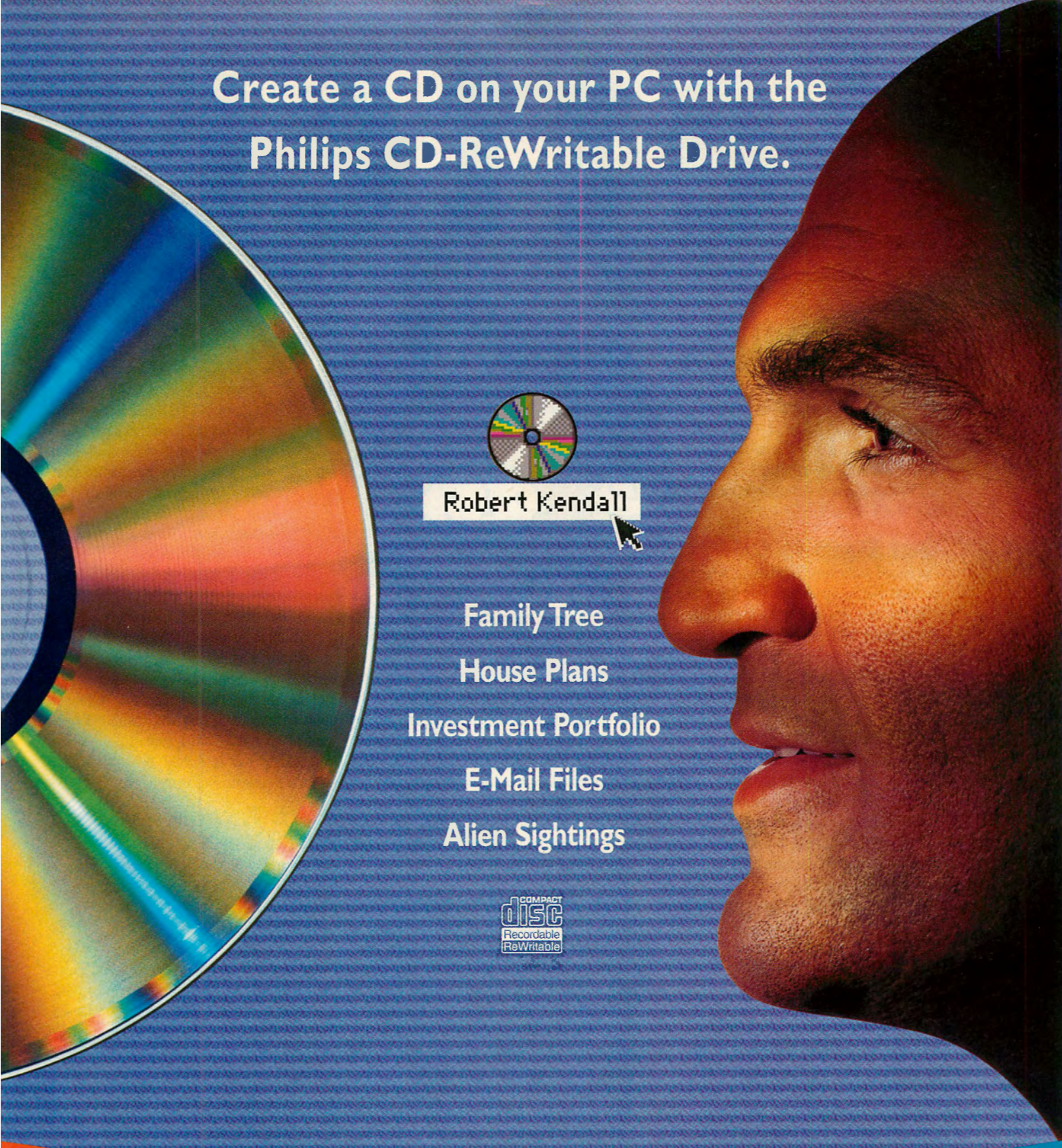

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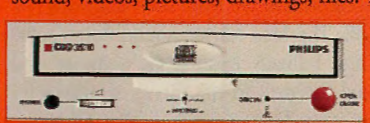

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letters

Baldness, babies, bagels, bugs, and a bastion of burbling babble.

This Month

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GET ON, GET ACTIVE. Talk to us and to other Mac addicts on the Web site.

But Bald Is *In*

I've found something interesting. Max has no hair! Not to make Max feel funny, but he could at least wear a wig! Your cute little Max would *really* look better with *hair!* I am writing this so you will give him a wig or something—OK? —A PERSON WHO LOVES HAIR *A LOT*, 10-YEAR-OLD JUSTIN LASELVA, ABINGTON, MA

No, Not at All

Earlier this evening I was leafing through issue 13 while giving a bath to my infant daughter, when she began to say what sounded like, "Ah, pooh," in rather excited tones. Now, the words of children just learning to talk require a bit of translating. It soon became clear to me: She was trying to say, "Apple, Apple." You can imagine the parental pride. I was beaming.

I could picture my sweet little girl, some 20-plus years from now, basking in the glow of the CRT and gunning for Cheryl's job. Sadly, my joy was short lived, and I soon discovered that her words had been much better annunciated than I first thought. But as I quickly evacuated her from the tub, I remembered that just before bath time, she had been watching me work on my employer-provided Wintel laptop. Coincidence? —DAVID C. BOGUT

The Plan Worked!

Here's a brief rundown of how I became a *MacAddict* subscriber. For several years now, I've subscribed to the *BBC Music Magazine*. Each month, I get a magazine and a classical music CD. My musical tastes vary, and this is a cheap way of adding culture to my otherwise uncultured life. I usually give the magazine a quick glance and then pop the CD into my stereo and play it. I was a little upset when, about a year ago, the CD wouldn't play. I was getting ready to send the thing back when, for some reason, I stuck it into my Mac's CD drive. Lo and behold, Gustav Holst's "The Planets" had been replaced by *MacAddict* issue 2. You and the BBC must print your CDs at the same shop, because mine was mislabeled. Needless to say, I found your CD much more entertaining than Gustav Holst. I have been a subscriber since issue 6 and just renewed for another year. —JACK NISCHIK, MUNSTER, IN

Oh, That's Logical Alright

In your July issue's CD, you had a movie of a PC being dragged on a rope behind a car in a parking lot. If you play that movie backward, the part where the cameraman said, "Oh no, oh no, ahhhhhh!" (sort of) says, "I want a bagel!" —BREEZE KINSEY, FOREST KNOLLS, CA

I was in Japan recently and hopped into a (rather expensive) cab, and the driver said, "So…where do you want to go today?" Something about that phrase seemed all too familiar, so I reached my destination—a bookstore—and looking through the magazines, stumbled upon a Microsoft ad that said, "Where do you want to go today?" So I came to a conclusion…Microsoft is staffed by cab drivers! —YUUKI NAKAYACHI, PHILADELPHIA, PA

We'd Rather Not Know

Are there any file-recovery utilities—namely those that can UNDELETE a file—available as free/shareware? Guess why I'm asking…. —MATTHEW A. TATE

I went to the Thrift Shop yesterday, and guess what I found? An Apple T-shirt! Who would give away an Apple T-shirt? A freak, obviously. Well, needless to say, I bought it. For a buck. An Apple T-shirt for a buck—what's this world coming to? —SARA OLSHER

Good Dog! Good Boy!

I borrowed a copy of Connectix Virtual PC from a friend. I wanted to try it out. Installation was a breeze. The software worked great, with one problem. Every time Windows 95 booted, that darn doorbell startup sound chimed, and my dog would run to the front door and bark her head off. The Mac startup sound never bothered her. I finally trashed the software and returned the disk to my friend. Windows 95 just upset my dog too much. —PHIL WELSHER

Recently Sighted

Vroooooom!

When Jeremy Goldsworthy turned 16, his parents bought him a truck—a Chevy S10, to be exact, because they felt it was big and safe. Jeremy, in a stroke of genius, decided to get a license plate that said PWR MAC. But another Mac addict in Michigan beat him to it, and he had to settle for PWRMAC1. Not bad, eh?

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Our Thoughts Exactly

On the subject of Bill Gates buying into Apple: The people at Apple and Mac addicts around the world should be reminded of ancient Greek history and the old adage "Beware of GEEKS bearing gifts." —Barry K. Paulus

This whole Apple/Microsoft deal reminds me of Disney's *The Lion King*. Mufasa (Gil Amelio) dies, so Uncle Scar (Steve Jobs) takes over with a new vision and brings the hyenas (Microsoft). If all goes as in the story, Apple will have a major low point while Scar and the hyenas are in charge. Then they (Apple) will be saved by some young unknown hero. Wouldn't that be great?!?!? —Robin Mitchell

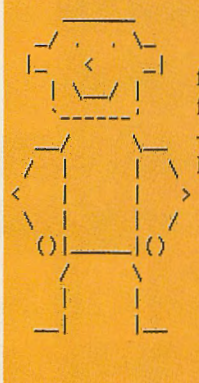
Geez, You're Bored

So, my buddy Hunger and I are sitting around the office after a full day of Duke Nuk…er…I mean work, and we have no idea what to do with ourselves. Thanks to some PC number cruncher, we had to stay overtime for the past week, while everyone else goes home to their nice little…err…homes, and we weren't too happy about it. Since we work in the art department, we are the only ones who use Macs, and we take a lot of guff about them, but all I ever say is, "Billions of colors, on the block," and that usually shuts everyone up. They try to get back at us by loading us up with demands, but we figure its probably their PC overlord's doing, since it's a well-known fact that using a PC drains your sense of humor.

We're discussing this, when we're hit by an idea! Why not bring a little sunshine into their drab little worlds!? So we gathered all the family pictures in the office and scanned them into our Macs. We then scanned our own photos in, and thanks to the wonderful world of Adobe Photoshop, we are soon one great big happy family...that is, if everyone's wife, husband, child, and pet were to look like Hunger or me. We get in early the next day, and we await the grateful peals of laughter and adulation that we will surely receive. At precisely nine (all PC users seem to be anal about time…us, we'll be there when we get there) they enter and the workday begins. All seems to be going well, at least for the first five minutes, when suddenly we hear the first burst of piercing laughter. It was the highest pitched laugh I had ever heard, and Hunger mentioned how much it sounded like a scream, but we figured she was simply so overtaken with mirth that all she could emit was one note. Then more laughs that also sounded a lot like screams, and we were having trouble figuring out why some of the guys were cussing along with their laughter…perhaps some kind of inability to express happiness due to extensive use of a PC. So after everyone had found our gifts, we stepped out into their world and awaited their praise….

Doctor says I'll be able to take the body cast off in a few more months, but there really wasn't much they could do with Hunger and that frame…man, I hope he doesn't strain too much when he goes to the bathroom. Well, gotta go, found the family picture of the company's president, and I hear Photoshop calling me. Anyone know where I can get a good photo of the Village People? —Reuben Reynoso

ASCII Art



OK, its not perfect, but it sure was fun to make.
—Michael Thole, Batesville, IN

Jason & Ionas, Barrie, Ontario, Canada

We Can Tell

If you really want to laugh hysterically—and you may have done this already—open up FreeVerse's freeware, Jared (The Disc, Sept97), and press Command-N to make it sing a few more times before it finishes the first verse. The image I get as I laugh is that of a chorus of little drunken mice, kinda like friends of Speedy Gonzalez. Anyway, I thought it was funny, but I have been up for days. —Clinton Groves

Cockroach, Definitely

When I recently started job hunting, I fully expected that I'd end up developing software on a Windows machine. At least, I thought, I would console myself by working on my Mac at home. As it happens, I got a job offer from a Montreal company that develops on Macs. I get to play all day with CodeWarrior Pro on a 200MHz Power Mac…and they pay me for it!! My only worry is that this is too much good luck for my current karmic balance and that I'll probably reincarnate as a cockroach or a VAX COBOL programmer. What do you think? —Yves Meynard, Longueuil, Québec, Canada

We Believe You

Right now, I'm on my Mac, surfing the Web, listening to my new Radiohead CD on my new Labtec speakers with SRS on. Tomorrow I'll go out and buy OS 8. I'm the happiest person on earth. —Bill Calabrese

"WOMAN WITH A FLOWER" *by* PAUL GAUGUIN 1891

"BALL AT THE MOULIN DE LA GALETTE" *by* PIERRE AUGUSTE RENOIR 1876

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LinksLS Macintosh

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letters

When in St. Louis, please stop by the Harvest restaurant. Ken Bousquet's brother is the chef—one of the best in town. —Steve Graham

Hello. Just thought I'd send you a list of the reasons PCs are better than Macs. Oh wait! There aren't any...never mind. —Ian Kurz

TWO AT A TIME *Why choose between a mouse and a trackball (or other imput device)? P.I. Engineering's Y-mouse Dual Serial Mouse Adapter ($50 street) lets you have both connected at the same time. The Y-key-key Dual Keyboard Adapter ($50 street) connects two keyboards simultaneously. —TK*

REASON NUMBER WHATEVER why the Mac is better than a PC: ADB ports. Just look at this thing you have to attach to your PC in order to use a mouse and a trackball at the same time. Yuk! —Lee Polzin

You Violent People!

I didn't fully realize how much I enjoyed your movies of those IBM thingies being hammered, dragged, and driven over. Somehow those images lodged themselves in my skull only waiting for an appropriate time to become self-actualized. My wife and I had some friends visiting us, and one of them dared to bring an IBM ThinkPad, which, of course, I promptly backed over with my car. I'm sure I would have enjoyed the whole process much more had I maliciously planned it. When it happened, after I heard the *crunch*, the first thing that entered my mind was, "For what this is going to cost me, at least it was an IBM!". So, should I paint a silhouette of a ThinkPad on the side of my car? —R. Johnson, Atlin, British Columbia, Canada

So there I was in the middle of this great New York heat wave wondering what fun I could have with a large magnifying glass, my neighbors' open window, and his IBM sitting like a soon-to-be roasted sitting duck right by it. Hmmm, ain't life grand? Keeping myself very amused. —John "Hawk" Sammon

P.S. Hey kids, don't try this at home.

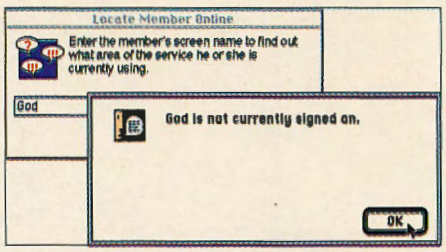
Subliminal Messages

Where do you want to go today? Straight to hell, apparently. The other day I saw a Microsoft commercial on TV: Sublime choral music drifts through the background as the unseen user surfs the Net and various Microsoft content using Internet Explorer. The commercial closes with the Microsoft slogan "Where do you want to go today?" and a final, furious blast of music. It's a very cool effect. But if you dig a little deeper.... As it turns out, the background music is the Dies Irae of Mozart's Requiem Mass. And the words of the final blast of music which accompanies "Where do you want to go today?" are actually "confutatis maledictis, flammis acribus addictis...." In English: "When the damned are confounded, and consigned to sharp flames..."; which describes exactly where I want to go today. Unfortunately, while Explorer will take you to hell for free, the upgrade to purgatory is pretty steep. —Mark T. Phillips

Congratulations to the whole team (and Kathy Tafel in particular) on the most excellent article in issue 13, "The Gentle Art of Verbal Mac Defense." Thanks to your article (and a few too many viewings of the most excellent movie *Dune*), I now have control of The Voice, the ability to influence people merely through word inflection. With this power, I can turn all of America into a raging holy army of Mac addicts! I've even figured out how to use this amazing power via email. You will GIVE Me a fREe subSCRIPTioN when my current one runs out. Aaah! Sandworm! —Mark Tomczak

But It Was a Trick Question!

Why do some stores even bother to say they are Mac vendors? A local electronics retailer from a well-known chain has reduced its already pitiful Mac display to a single, forlorn looking Performa 6400. Even in its neglected condition (the mouse is gone and the hard drive and files



NICE TO SEE that there are still some places AOL hasn't reached. —Patrick Thompson, Troy, MI

are all named something like jo,,,fhfkk,,,f), the Performa still looks formidable. It's become a habit of mine to go to that Performa just to give it a little attention; after all, computers are people too, right? The other day there happened to be a salesperson nearby as I approached the 6400. This conversation ensued:

"Hello, welcome to the Wiz. Can I help you with something?"

"I was just looking at the Performa."

"Good machine," he said. "200 megahertz, 1.6-gigabyte hard drive, and 16 megs of RAM."

I figured I'd play along to see if he really knew anything, so I asked, "Is this the one with the video configuration?"

"You mean with MMX?" he replied.

They really haven't a clue. —Steve Weitzman, Brookfield, CT

Oops!

In the review of IXMicro's TurboTV (Sept97/p70) we stated that the TurboTV does not include software. Well, we were wrong, wrong, wrong. The TurboTV comes with Digerati's MovieClips, a digital video editing program.

You Know You're a Mac Addict When...

...you can't walk through the hall without hearing sounds for Marathon. —Mike Lorsung

...you catch yourself rearranging your granddaughter's plastic crib toys to follow the order of the colors in the Apple logo. —Anthony D. Saxton, Las Vegas, NV

...you have a dream that your 1-year-old son is just a trial version and you scramble to gather enough cash for registration and a serial number. —Summer Tuller

...you fold the top right corner of all your papers. —TomioUeda

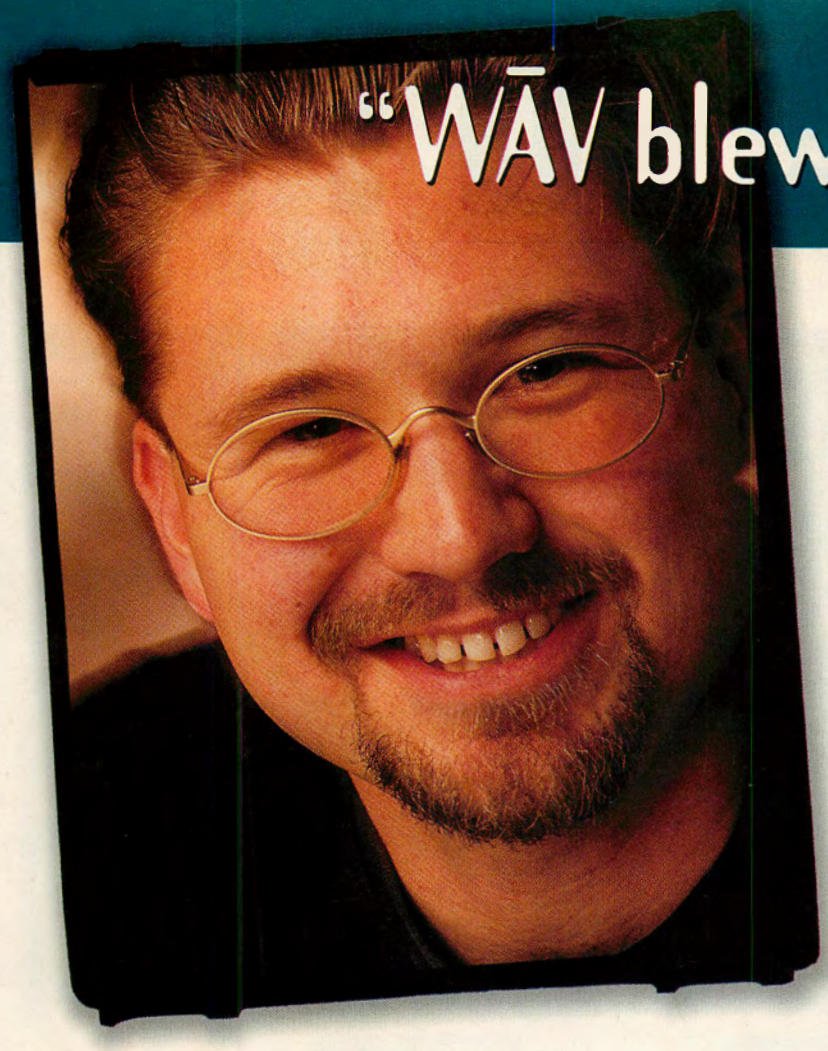
...you have the Apple corporate headquarters listed in your address book. —Vasily Koroslev

...you tell a friend with car trouble, "Try startin' her up without Extensions by holding down the Shift key." —Nate Loontjer

...you want to increase the resolution of an impressionist painting in Photoshop. —Scott Admiraal, Grand Rapids, MI

...your idea of getting dressed up to go out is putting on your Mac OS T-shirt. —Patrick McCloskey

"WĀV blew me away."

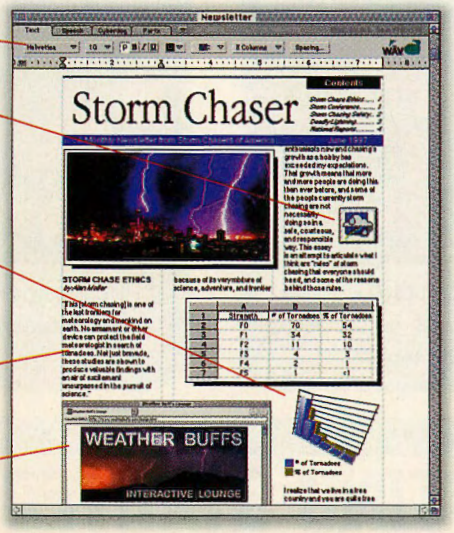


Create media-rich, living documents with the first `net-enabled word processor.

Imagine the control and the freedom to focus on *your documents*, instead of on bloated, "legacy" applications. You decide what functionality you need, or don't need, and you plug it in. **Imagine the power of components helping you work faster and easier in an intuitive workspace** with true drag and drop capabilities. With WĀV, simply grab and place nearly anything you want to utilize in your documents—period. Java™ Applets, URLs, component parts, Netscape™ plug-ins, e-mail text files, Word™ and WordPerfect® files, HTML files, PICTs, GIFs, JPEGs, graphs, sound files and QuickTime™ movies all become integrated parts of WĀV documents—*not just links* to system-consuming, traditional applications. **Imagine utilizing `net data instead of just browsing it** by dragging websites, information and `netfiles across your screen and dropping them directly into your documents. With WĀV, the Internet is *built in*, and truly becomes your own personal document resource. **Imagine the flexibility** of embedding cyber-buttons with direct links to `netsites—or if you prefer, *embedding the sites themselves* as living parts of your documents. **Imagine virtually no learning curve** and great compatibility with all your old stuff.

> "WĀV is the spiffiest word processor to come along in several years. It's elegant and intuitive, and its integrated Internet services are a godsend."
> ~ *Mac Addict, March '97*

MacWorld Expo '97 ~ Apple's* Component Theatre helps Macintosh users from around the world experience the simplicity and power of WĀV.



Folder Bay ~ Simple-to-use, easily accessible text controls are located here. You can also add your own project folders!

Cyber Button ~ Create single-click hot links from within your document to any Web, network, or other file location. Instantly launch local applications, sound or movie files, images and more.

Embedded Part ~ WĀV Documents are living documents* where components can interact with each other—as well as with WĀV. In this case, "Numbers & Charts"* (component parts from Adrenaline™ Software)* display data in an active-3D graph linked to a spreadsheet. As data is edited, the graph automatically updates.

Dynamic Text Wrap ~ When you drag a part into your document, you'll see how existing text wraps around the part as you move it—all in real time!

Embedded Web Page ~ Never before has a world-class word processor come with built-in Internet navigation, browsing, viewing and retrieval tools as a part of its control panel. When you open documents, WĀV automatically opens live home pages or other embedded sites.

Other straightforward editing features include full tabs, colored text, search and replace, AppleGuide help, text to speech, word count, justification control, and full line-spacing. Most people only use about 3% of the text-editing features found in their traditional word processors. Now, you no longer need to lug around all that stuff! With component technology and WĀV, if you need extra text-handling features, simply plug them in later.

*WĀV installs complete with OpenDoc, Cyberdog (`Net Browser, E-mail, `Net Search, CyberButton, `Net Management), C100™ Components LEXI & C-TextBox, and Apple Live Objects Essentials (QuickTime™ Viewer, Image Viewer, 3DMF Viewer, Apple Draw, Apple Audio).

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Freakin' Awesome *rating, Mac Addict Magazine, March '97*

BYTE 1997 Editor's Choice *and 5-star technology rating.*

BEST of SHOW *MacWorld Boston '96*

Component 100 MEMBER

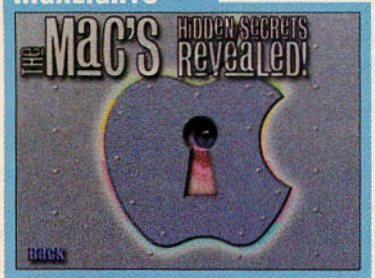
WĀV incorporates the power of other Component 100™ Member companies including Cyberdog, Softlinc, and Corda. For more information on other component parts, visit the Component 100™ webpage at www.c100.org. Digital Harbor, L.C. is a private company with headquarters in Orem, UT, U.S.A. Digital Harbor™, WĀV™, Living Documents™, and The Next Generation Desktop™ are trademarks of Digital Harbor, L.C. All other trademarks or tradenames are the protected property of their respective owners. **System Requirements:** Macintosh/Power Macintosh, component application size: 1.6 MB, suggested memory: 8 MB (virtual memory on); 16 MB (virtual memory off) MacOS version 7.5.1 or later, OpenDoc 1.0.4 or later. Digital Harbor, L.C., 167 S. Orem Blvd., Orem, UT 84058, **www.dharbor.com**, (801) 224-5184, fax (801) 224-5183. ©1997 Digital Harbor, L.C. All rights reserved.

DIGITAL HARBOR, L.C.™

the disc

Here's your key to unlocking hundreds of megabytes of fantastic Mac software.

HIGHLIGHTS



Click this button to get all the secrets we didn't tell you about on page 38.

SOFTWARE

Get descriptions of the fine software products on The Disc, then install them!

DEMOS

Launch demos of Carmageddon, Ares, Civilization II, and Connie and Bonnie's Birthday BlastOff.

INDEX

Click here for a handy jumping point to all the screens on The Disc.

Shhh, it's a secret. Don't tell anyone, but we have some killer game demos this month. And that's not all—we've got tryouts of Adobe products, too. And to top it all off, this month's staff video also doubles as the contest. Can you save Cheryl? Do you want to?

—Kathy Tafel

GETTING STARTED

1. Pop The Disc into your CD-ROM drive.
2. Double-click the *MacAddict* Tour icon for PowerPC or 68K Macintosh.
3. Have fun!

REQUIREMENTS

Any Mac can access the shareware, demos, and System software from the Finder. Accessing the full CD-ROM interface requires 12MB of real RAM with System 7.1 or earlier, or 16MB of real RAM with System 7.5 or later.

OUR DISC SPONSORS

To find immediate information from our sponsors, click on the sponsors button on the main screen. Or you can wait until you see a message from them in the lower right-hand corner of the main screen. You also can access sponsor information from the main window in the Finder.

Aspyr Media

888-212-7797
http://www.aspyr.com

Shattered Steel

Congratulations, you've been elected to save the human race. Here are your nukes. Fifty adrenaline-pounding missions, plus 15 multiplayer missions with up to 16-player network battles (or cooperate to complete the entire game), all on a fully navigable, ultrarealistic, voxel-rendered terrain. Arm your Planet Runner with blazing firepower—more than 25 armaments, including: Gatling guns, guided missiles, fuel-air mortars, and plasma cannons. This is no simulation but fast and furious total 3D warfare!

Bonkheads Deluxe

Race through 190 levels of unparalleled chaos as you control Grag & Thog Bonkheads on their mission to rid the underworld of marauding pests. Stunning graphics and an included level editor will keep you playing till the wee hours. Play alone, two on the same computer, even networked. Combat your way through 12 different underworlds such as Ancientville, Waterville, Trollsville, and more. So addictive, you'll develop a hump!

Bungie—Myth

800-295-0060
http://www.bungie.com

Myth is a tactical-level game of epic battle set in a fantasy world. A multimetric game, Myth gives gamers unprecedented freedom to view the terrain and their forces, orbiting around their heads or zooming in for a close-up. Mastery of formations and disciplined movement of armies is critical to success. Myth features cross-platform networking, while Bungie's MetaServer system makes Internet play simple. Myth includes maps designed for networking and alternate networking scenarios such as Assassin and King of the Hill.

Digital Frontiers—HVS 2.0 Series

800-328-7789
http://www.digfrontiers.com

Award-winning HVS (Human Visual Systems) ColorGIF 2.0 and HVS JPEG 2.0 give Web developers stunning 24-bit-quality images at 8 bits or less. Web graphics now download 50 to 70 percent faster with no loss in image quality from a 24-bit original. Try full-featured demos free for three days before purchasing.

TechWorks—Power3D and PowerCPU

800-688-7488 (ask for Game Guy)
http://www.techworks.com

Upgrade your PowerPC to a Power Arcade! The Power3D card is dedicated to bringing you the best performance available for Mac OS 3D games. Most 3D computer graphics solutions try to be all things to all people. No compromises here. The Power3D was designed for one thing only, and that is great games! This is truly the most awesome gaming card available on the Mac! The Power3D does not replace your 2D graphics, it works with your existing graphics card to provide you the absolute in 3D performance. Install the Power3D in your PowerPC (requires one available PCI slot in your system) and use the provided pass-through cable to turn your PowerPC into a Power Arcade system!

Earthlink—TotalAccess

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http://www.earthlink.net

TotalAccess is Earthlink's complete software and Internet connection package. It includes Netscape Navigator, award-winning Internet access software, and everything needed to register for complete Internet access in less than five minutes. After the $25 setup fee, unlimited access is provided for $19.95 per month. 'Round-the-clock tech support is provided via an 800 number.

Europa Software—Web Quick

http://www.europasoftware.com

Frustrated by Bookmarks? Web Quick tracks every page you visit and automatically organizes them by site. It lets you create custom topics—and keeps them all at your fingertips with handy pop-up menus. Web Quick even converts existing Bookmarks. No wonder *MacWEEK* called it "the first Web utility that is essential"!

Fox Interactive—Virtual Springfield

http://www.foxinteractive.com

Attention *Simpsons* fans! Feel right at home with Fox Interactive's The Simpsons: Virtual Springfield, an exploration of all things Simpson. Explore every corner of the town in a 3D universe with more than 50 interactive locations, including hundreds of action sequences, voice loops, and more than 35,000 frames of original animation.

MacSoft—Civilization II

800-229-2714
http://www.wizworks.com/macsoft

Make every critical social, economic, and political decision as you build an empire to span history. Compete against some of the greatest leaders of all time. It's strategy. It's discovery. It's your destiny. So plan your every move carefully. Because in this game, you either stand the test of time or you're history.

STAZ Software—Classroom Publisher

800-348-2823
http://www.stazsoftware.com

Classroom Publisher is a desktop publishing program designed with schools, teachers, and students in mind. It allows anyone to quickly and easily create calendars, clip art, greeting cards, and all kinds of reports, banners, and stationery without even picking up a manual! It was written in the world's fastest Basic compiler—FutureBASIC, also sold by STAZ Software. See the Our Sponsors section on The Disc for more information.

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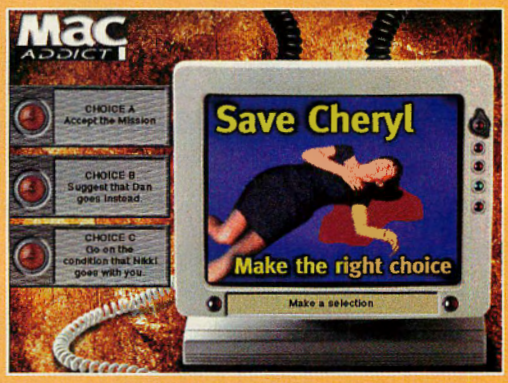
WAV is the first Net-enabled component word processor...that works the way you do. WAV's clever interface provides seamless and immediate access to other OpenDoc, Netscape, and Java components. Aside from the ability to contain parts, WAV can also be embedded into other OpenDoc parts.

CONTEST

Win!Win!Win!Win!Win!Win!

Get your very own copy of Worms!

Every once in a while, you need a change of pace. The end for this month's contest is still the same: We give you a secret code to enter on our Web site for your chance to win a prize (this time, a copy of Team 17 Software's Worms). But the means is a little different. Click on the staff button on the main screen. You'll find a movie screen and three tabs on the left. As the movie plays, you get to make choices. Make all the right moves, and you'll get the secret code.



YOUR ULTIMATE GOAL is to go back in time to save Cheryl.

AH, THE QUANDARIES YOU'LL FACE: Should you take Nikki along? Is a month of paying for her lunch worth it?

HELP

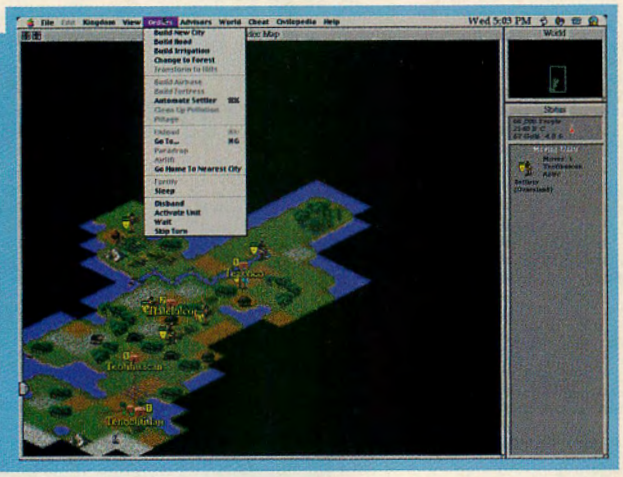
You Have a Problem?

What! You need help? Well, if your superphat disc is mangled, warped, broken, or otherwise disturbed, you can get a replacement from Imagine Publishing's customer service. We've set up a special Web site where you can order one at http://support.imagine-inc.com. If you can't install anything, or get disk errors, do the same.

If you're having problems with System software, we recommend calling the good folks at 800-SOS-APPL. They'll be more than happy to help you.

the disc

GAME DEMO
Civilization II



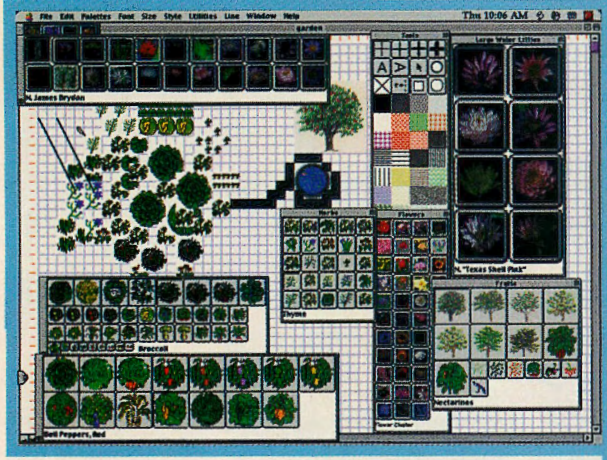
Civilization II is a highly addictive, strategic game that plays like a good book. The story is rarely the same, and the game is customizable with controls for size and type of map, skill level, type of civilization, and more. Even non-game players can easily get hooked. See review on page 64. —*JRG*

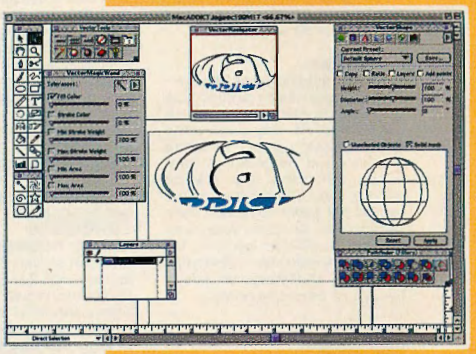
MacAddict15:Commercial Demos:Civilization II Demo

WINNER!

Apparently our random-access script loves people from Laval, Quebec, because this is the second time someone from that lovely town to the north has won one of our contests. Either that, or Laval has an unusually high proportion of Mac addicts. At any rate, Jocelyn Grimard has won himself a copy of Extensis VectorTools. Hooray!

MAC HOME AND GARDEN
MakeItGrow





Have you ever wished for a garden but never had the energy to dig in the dirt? This demo is especially fun for the armchair gardener, plant lover, or anyone who wishes they had a yard. An empty grid is populated by selections from palettes of plants, including large vegetables, small vegetables, herbs, flowers, fruits, and water plants. Prospective gardeners can even lay paving stones and set up birdbaths without getting their hands dirty. —*JRG*

MacAddict15:Commercial Demos: MakeItGrow 2.0 Demo

INFORMATION

Apple Easter Eggs 1.5
GURU 2.4.3
Mac Identifier 2.2
Type•Creator Database 2.9

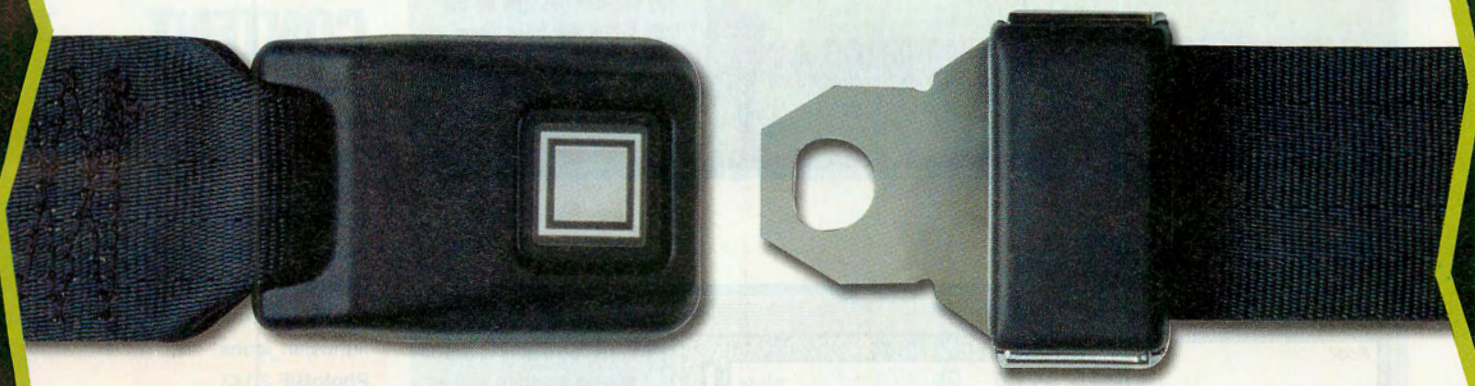
GAME DEMO
Achtung Spitfire

This beautifully designed cinematic morsel by Big Time Software for The Avalon Hill Game Company is fun for many age groups and both genders. A nostalgic front entrance brings players back to the days of the Second World War and submerges them in an all-too-real dogfight with the enemy. —*JRG*

MacAddict15:Commercial Demos:Achtung Spitfire Demo

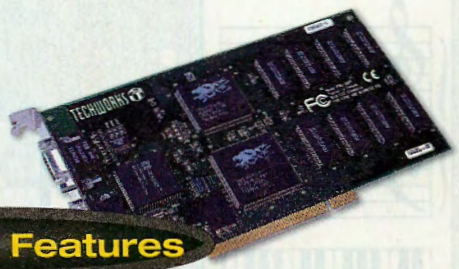
BEFORE INSTALLING OUR NEW POWER3D™ GRAPHICS ACCELERATOR,

PLEASE CONNECT THE FOLLOWING PERIPHERALS.



Better strap yourself in.

TechWorks introduces the very first gaming card for the Mac with 3Dfx VooDoo Graphics technology. That means you can turn your PowerPC into a Power Arcade, with mind-blowing graphics for the latest games. Take it for a spin with new 3Dfx-enabled titles right in the box, including Quake Episode 1, MechWarrior 2, VR Soccer and Weekend Warrior. It's completely plug and play, and works with Mac OS 8. So call 1-800-434-4031, order online at www.techworks.com or ask for Power3D at your local Mac retailer. And get ready to put the pedal to the metal.



Power3D Features

- Perspective-corrected texture mapping
- Bi-linear and advanced texture filtering
- Gouraud shading and texture modulation
- Anti-aliasing and alpha blending
- Special effects: fog, transparency and translucency

Check out these Mac games bundled with Power3D.

Quake™ Episode 1 by iD Software

MechWarrior® 2 by Activision

VR Soccer™ by VR Sports

Weekend Warrior™ by Bungie Software

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The Mac Zone

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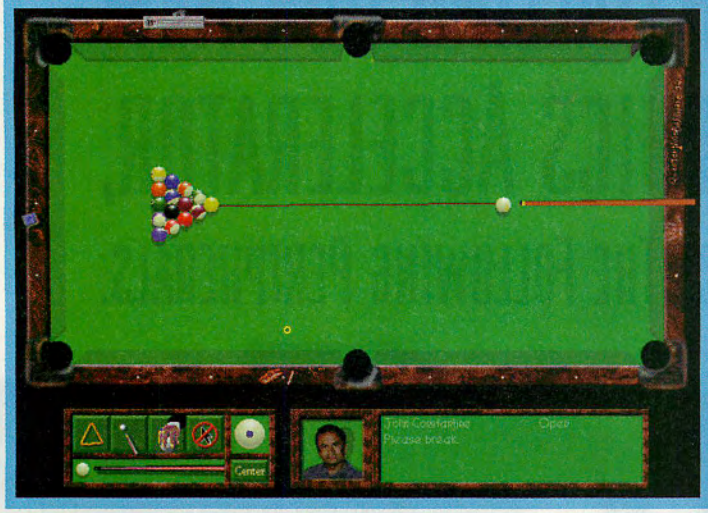
the disc

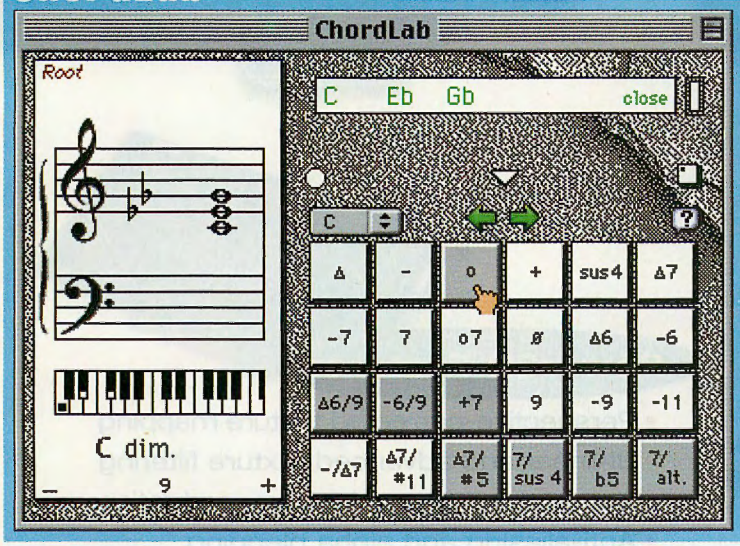
STRATEGY GAME
Ultimate Pool



So, you think you're a shark? Try your hand at Quarter Note Software's version of pool. A deceptively simple interface hides the heavy computation that makes it run exclusively on PowerPC Macs. You aim at the ball formation with the mouse-triggered plumb line, and you can put spin on the ball. When you miss, your opponent might even offer you the chalk. —*JRG*

MacAddict15:Fun & Games:Ultimate Pool 1.1

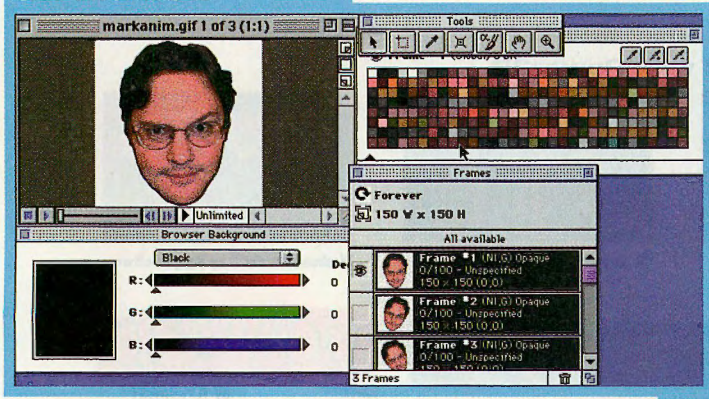
MUSIC
ChordLab



Arthur Roolf designed a nifty chord-playing program with an attractive interface. If you don't register, you can play with chord sounds—just press buttons labeled with numbers, sharps, and flats. Registered ChordLab owners can sharpen their sense of pitch with ear training, among other fun facets of this $20 program. —*JRG*

MacAddict15:Graphic & Sound:ChordLab 1.5.1

WEB DESIGN
GIFmation



Simple, powerful tools for the Web are rare and wonderful things, especially in the graphics arena. BoxTop Software's GIFmation's intuitive interface and handy palettes take much of the guesswork out of GIF animation. One of the nicer additions to this package is the browser background palette with its decimal-to-hexadecimal conversion. —*JRG*

MacAddict15:Graphic & Sound:GIFmation 2.1

FROM MACADDICT

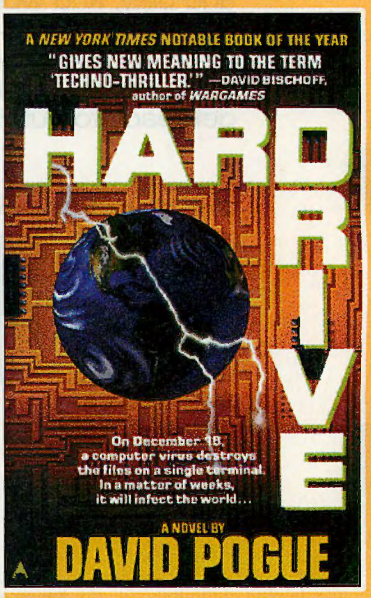
From MacAddict replaces the old This Issue folder—you'll find outtakes from this month's staff videos. What more could you want?

CREATIVE CONTENT

Acrobat Reader 3.0.1
CDToAIFF 1.2c
Clixsounds
ColorSafe 1.1 FAT
Curt's StartUpScreens Vol. II
Frank's Desktop Pictures
GifBuilder 0.5
Graffix Collection
ikthusian_icons
PhotoGIF 2.1x3
Pictacular 0.4.3
ProJPEG 2.1
SoundApp 2.4

HARD DRIVE

Installment 9 of David Pogue's Silicon Valley thriller finds our hero playing hot potato with a hard drive. Watch out for that tree!



Somebody call Bob and tell him about PowerPrint

There are more folks than just Bob who don't realize they can print from a Macintosh to a PC–printer. For less than $100, PowerPrint has the software and smart cable that makes it all possible — a complete package.

Imagine the freedom you'll have. With PowerPrint installed, you'll be able to print from your Mac to over a thousand different printers from companies like Canon, Epson, Hewlett–Packard, Okidata, Panasonic, and more. What that really means is you can hang onto that old printer. Or, if one day you're tempted by the great features and prices of the new PC–printers, go ahead and buy one! With PowerPrint, you're free to choose.

So get PowerPrint if you think you'll be needing to print to a PC–printer anytime soon. And don't forget to call Bob, the poor guy. He could really use some advice.

PowerPrint — the simple solution for anyone who needs to connect a Mac to a PC – printer

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the disc

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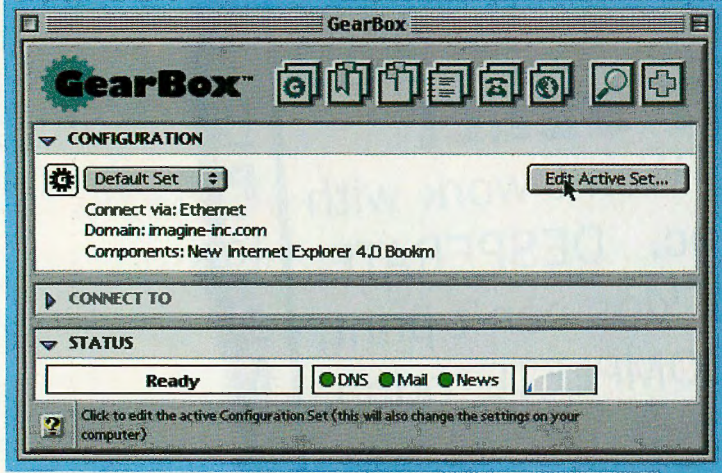

Groups of people who use the same computer will appreciate this handy shareware package from Rockstar Studios. Now you can maintain several different mailboxes, address books, bookmark files, and configuration setups. The interface is intuitive and informative and does its best to fill in the gaps where those overused Internet service provider's consumer help lines often fail. —*JRG*

MacAddict15:Configuration: GearBox 1.1

MORE GAMES

- Adobe Tryouts
- Ares Demo
- Astro Chase 3D 1.0 Demo
- Audiofile 3.1.1 Demo
- Auto F/X Demos
- Bumbler Bee-Luxe Demo
- Carmageddon Demo
- CheckMate Demo
- Command & Conquer Demo
- Connie & Bonnie Demo
- InventorLabs 2 Demo
- LightningDraw/WEB
- Metro 3.5 Demos
- OutBox Demo
- Virtual Wings Demo

SHOOT-'EM-UP
Lunar Commando

This bizarre collection of brightly colored, aim-'n'-shoot spaceships and peculiar green aliens by Smokin' Software is reminiscent of classic games, with a few twists. A simple concept with an eye-catching interface makes this game fun and addictive. And $15 is a small price to pay to support shareware. —*JRG*

MacAddict15:Fun & Games:Lunar Commando 1.0

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the web site

OCTOBER

By Jennifer Gwirtz

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
		1 How do I...? is the theme for **this week's Q&A.**	**2** On the first Thursday of the **creepiest month of the year,** it's time for a scary Shareware Pick of the Week.	**3** If you're really good, we'll tell you what's coming up in our December issue. Just **come on by our Web site,** do everything we tell you, and tune in....
6 On the 108th anniversary of Thomas Edison's **first motion picture** showing, we'll show you our favorite Site of the Week featuring QuickTime creations!	**7** It's time for our readers to be heard! So **what do you think** of issues surrounding bandwidth and aesthetics? Check out our newest poll.	**8** On this day in 1964, Ringo Starr passed his driving test. On this day in 1997, Jennifer Gwirtz will be put to the Q&A test. Be nice to the new kid. (Hint: **Ask art questions!**)	**9** In honor of Miguel de Cervantes, 450 years old today, our Shareware Pick of the Week will be an assistant for those of us with **windmill-jousting** habits.	**10** David Reynolds, one of *MacAddict*'s Mac experts, shares some tips on Mac care and feeding in our Friday **Web Exclusive.**
13 In honor of Canada's Thanksgiving, we feature the **Canadian Site of the Week.**	**14** Today brings another update of David Reynolds' fabulous **Practical Mac site!**	**15** In honor of the dogcow's 10th birthday, we're digging up some **weird Apple trivia** for our Q&A Wednesday.	**16** In honor of National Boss Day, we will feature a cool Shareware Pick of the Week as a **gift to the leader** of our team, Cheryl England.	**17** In honor of Mark Simmons' return from a British honeymoon, we will feature an article about those **ancient artifacts** of text-based communications, emoticons.
20 There's nothing punnier than a **Web denizen on the rampage.** Our Site of the Week feature owes many coins to the pun jar.	**21** For all of you faithful folks out there who have been sending Jennifer Gwirtz their art, our Reader Art Gallery **startup screen** update happens today!	**22** OK, so we've all felt dumb at times, even the staff of *MacAddict.* This Q&A Wednesday is devoted to the questions that seem **too silly** to ask.	**23** Today we feature a fun and **totally useless** Shareware Pick of the Week on Weird Al Yankovic's birthday.	**24** As it gets dark outside, we at *MacAddict* turn to thoughts of impending winter and the **state of the Mac** in our Web Exclusive.
27 The Site of the Week is a well-designed **paradise** of graphic art, honoring Roy Lichtenstein, who was born on this date in 1923.	**28** Jennifer returns to the Reader Art Gallery rack room and pulls out a **collection of fine art** for the pleasure of our readers.	**29** Got some questions? Mark Simmons **might have some answers.** It's Q&A Wednesday!	**30** **Trick or treat!** It's time for the Shareware Pick of the Week.	**31** This Halloween is a good time to enjoy Kathy Tafel's seasonal Web Exclusive. Brew up some **hot cider,** turn on the mood music, and enjoy!

Thanks
to Scope Systems' Today in History page (http://www.scopesys.com/today) for history references
&
to Owen Linzmayer's *The Mac Bathroom Reader* for information on the dogcow!

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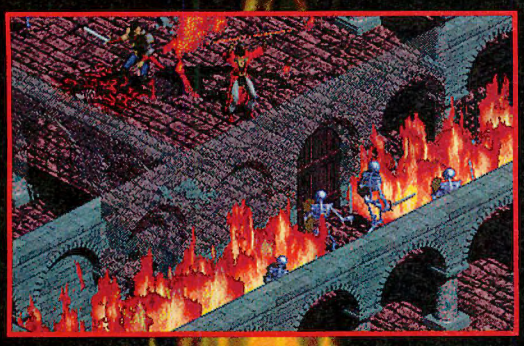

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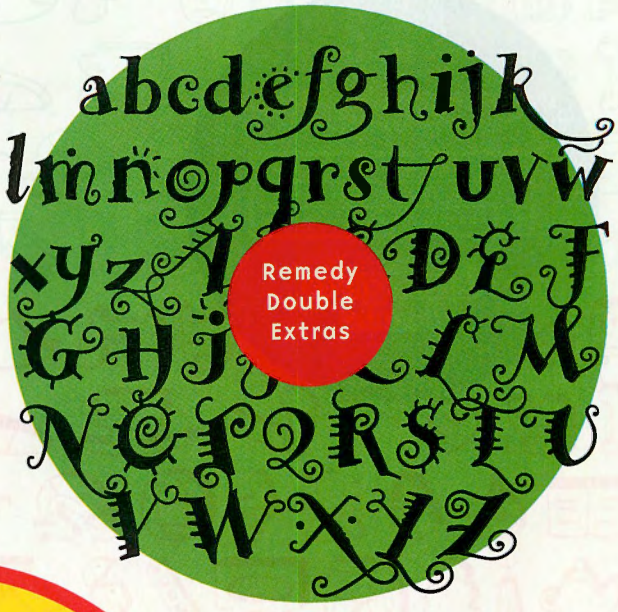

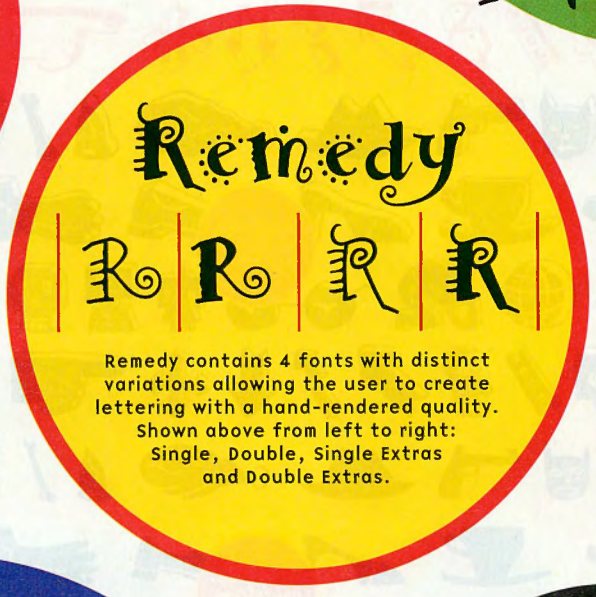

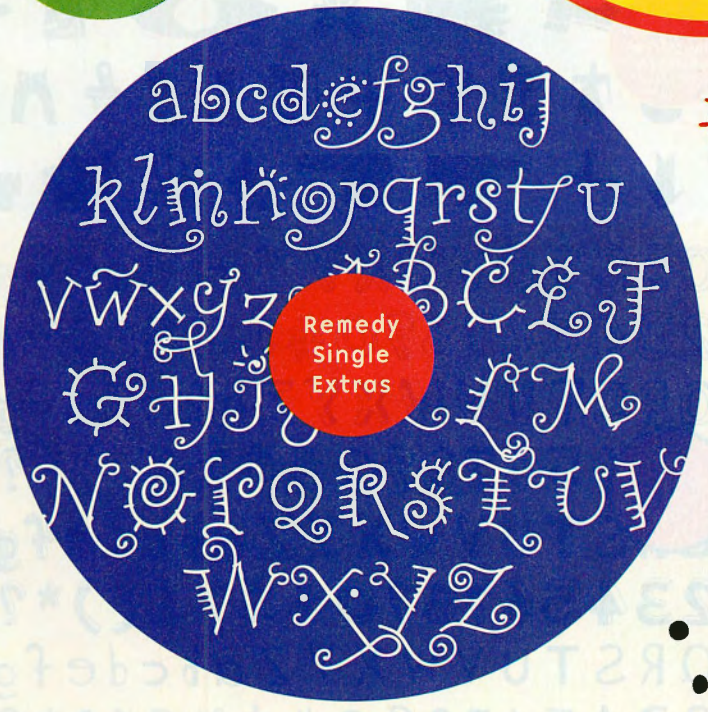

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Power failure, BeOS or BS, Nifty-keen utilities, Reality Fields revealed, and more!

Steve's In Charge

Keep score at home as Apple surges back to health!

Lloyd Dangle

It all started when Steve Jobs sold his dying NeXT Software company to Apple for 400 million dollars. Little did Apple CEO Gilbert Amelio know that, despite his protests of "I'm still in charge of the company," Jobs was, at that time, initiating a takeover. These days, Jobs is clearly calling the shots at Apple—and whomever Apple hires as a CEO will need to back these decisions 100 percent. Here's our list of the top nine things Jobs has done since his return.

• Brought in top-notch software and hardware engineers to replace Chief Technology Officer Ellen Hancock. In March, Apple announced a restructuring, focusing the product lines and incorporating NeXT employees into the org chart. Avie Tevanian, vice president of engineering at NeXT, and Jon Rubinstein, the hardware engineer who designed NeXT's ground-breaking black cube, were promoted to head up software and hardware development, respectively. These areas were formerly the responsibility of Ellen Hancock.

• Nixed Newton. At the end of May, the Newton group was spun off into its own company. During Apple's developers' conference earlier in the month, Jobs had stated that he thought it was hard enough for Apple—or any company, for that matter—to support two operating systems but that it would be impossible to support three (the Mac OS, Rhapsody, and Newton).

• Sold 1.5 million shares of Apple stock. In July, Jobs sold 1.5 million shares of stock, sending Apple's stock down to an 11-year low. Why? Most likely, Jobs was pulling the ultimate power play—sell a huge block of shares and watch the Apple stock go down, down, down until the company became an easy takeover target for someone like Oracle CEO and Jobs' friend Larry Ellison. Alternately, the Apple board could opt to get rid of Amelio in order to prevent any more damage from Jobs and any more wrath from shareholders.

• Saved Macworld Expo attendees from a boring, long-winded speech. Jobs' August Macworld keynote was 45 minutes short and completely focused, compared with Amelio's three-hour, rambling fiasco in January.

• Rehired the Chiat/Day ad group. With criticism of Apple's advertising (or lack thereof) mounting, Jobs rehired the company that made the groundbreaking 1984 commercial, ousting long-time agency BBDO.

• Revamped Apple's board of directors. In a smart, aggressive move, Jobs ousted much of Apple's previous board of directors, including Mike Markkula, the long-time member who had previously wielded ironclad control over the board. Current members include an impressive mix of industry leaders with experience in marketing, sales, finance, large-scale company turnarounds, and dealing in the Far East.

• Made nice with Microsoft. In what was mainly a public relations move, Jobs formed an alliance with Microsoft, allowing the company to invest $150 million in Apple in return for a promise that it would continue to support the Mac with Microsoft Office. Within hours of the announcement, Apple's stock returned to the mid-20s.

• Implemented cost-cutting for executives and employees alike. In August, Jobs informed all Apple employees of cost-cutting measures, including: converting executive cash bonuses into stock options, covering all employees with the same severance package (no golden parachutes), ending sabbaticals, and booking employees in coach class instead of first class when traveling by air.

• Stopped the revenue bleeding caused by clone vendors. By far the most controversial subject of Jobs' reign is the clones. Jobs has been openly aggressive with clone makers, demanding a higher payback for the OS than ever before—if, indeed, he'd even deem to renew the clone vendors' licenses. In August, Power Computing's COO, Joel Kocher, resigned because he thought the company should fight Apple in court and CEO and founder Steve Kahng disagreed. (As we went to press, Apple purchased some of Power Computing's key assets, including its Mac OS license. (See "Apple Takes Bite Out of Power," p29).

These actions won't win Jobs a popularity contest, but they may help Apple climb back to profitability. —*KT*

Things To Do

- [x] Get lots of money for my dying software company
- [x] Jon and Avie, VPs or else!
- [x] Nix Newton (another bad Sculley decision)
- [ ] Buy eMate to send to Lisa at college
- [x] Gil, out
- [x] Ellen, out
- [x] Board, out
- [x] Me, in
- [x] Larry, in
- [ ] Buy a pair of shoes with cash from the sale of Apple stock
- [x] Repeat "I am the CEO of Pixar, a successful company" 20 times every night
- [ ] Tell that cheeky Nikki Echler to stop making fun of my hair
- [x] Make up with Bill (hope he doesn't recall that "no taste" comment)
- [x] Scam $150 million-plus out of Microsoft
- [ ] Trade in that IBM ThinkPad for a PowerBook 3400
- [x] Rehire Chiat/Day—they're so cool
- [x] Make cover of *Time*
- [x] Get stock back up to mid-20s
- [x] Tell Guerrino no more first-class trips to Disney-World
- [ ] Cut more company fat by offering vegan-only fare at the Apple campus cafeteria
- [x] Make lots of decisions
- [x] Interview CEO candidates
- [ ] Hire CEO
- [x] Show Joel that nobody tries to upstage me and gets away with it

Apple Takes Bite Out of Power

Mac community powerless as Apple eats its young

Apple's original, naive, plan to license the Mac OS in 1994 envisioned clone vendors expanding Mac OS market share by selling into markets in which Apple was weak. But, Apple CFO Fred Anderson estimates, 99 percent of Mac clones have been sold to existing customers. It could hardly have been a surprise that it would be easier to market a product to a customer who was already interested in a Mac than to interest a Windows user in a Mac clone. Apple hasn't been able to do it, how could a no-name clone vendor do it? Steve Jobs decided to put an end to cloning that doesn't expand the Mac market, starting with Power Computing, the most egregious offender.

TOO GOOD

Power Computing built a thriving business selling Mac compatibles directly to users via the phone and Web. It was too successful, as it turned out. Power Computing wooed away Apple's core customers—the 20 percent who knew exactly what they wanted in a Mac—by giving them better prices, better performance, and better configurations.

TOO STUPID

Apple's original licensing deal garnered it about $50 per clone. If Apple sold, for instance, a $3,000 machine with a 20 percent profit margin, it would reap about $600 of gross profit. So, for every clone sold to a customer who would have otherwise bought an Apple-brand machine, Apple would lose about $550.

TOO BAD

To staunch this financial wound, Steve Jobs worked out a deal with Power Computing CEO Steve Kahng. For $100 million of Apple stock, Power Computing returns its Mac OS license, gives Apple exclusive rights to its 200,000-plus customer database for five years, and lets Apple make employment offers to about 25 key staff in Power Computing's direct marketing, manufacturing, and engineering departments. Power Computing will sell its current lineup of Mac compatibles through the end of 1997, and Apple will provide Mac OS support to Power Computing customers.

Apple's buyback of Power Computing's Mac OS license does not address the reasons why 20 percent of Apple's best customers chose to buy their machines from another vendor. Guerrino De Luca, Apple's VP of marketing, stated that Power Computing's greatest contribution was its direct sales model and custom configuration. But the clone maker also had better price/performance ratios than Apple, it consistently beat Apple to market with the fastest processors, and it had a much better marketing message. "Give your dreams a chance" is incredibly wimpy compared with "You can take my Mac when you pry my cold dead fingers off the mouse." Hopefully, Apple not only will have something in place next January to pick up demand left by Power Computing but also will be able to release interesting machines in a timely manner without the impetus of more attractive clones—and roll out a marketing message with a little more bite to it. —*KT*

Overpowered

1. Power Computing will retain its name, logo, and brand.
2. Power Computing will make Wintel clones, including high-end laptops with Intel's Tillamook chip.
3. Power Computing will not ship the already-designed PowerPC 750-based systems.
4. Power Computing will include Mac OS 8 on its systems.

Slinging Slang

The folks at Apple not only work with secret code, they often seem to speak in a secret code. The next time you're lost in Cupertino without your technogarble translator, you may want to refer to the following jargon buster for the real scoop on Apple slang. —*NE*

APPLE TIME ***n.*** A 10- to 15-minute delay. Example: That bug report you requested is going to be a little late—Fran's running on *Apple time.*

DOUBLE-CLICK ***v.*** [from action used on computer mouse] To investigate a topic further, dig deeper into an issue. Example: We've barely talked about the Microsoft deal; let's *double-click* on this and get down to what really happened.

END RUN ***v.*** To go over someone's head. Example: When Gil couldn't fix the company, Jobs made an *end run* to the board and got him fired.

GATING ISSUE ***n.*** [from semiconductor industry] Anything that might prevent you from reaching your goal. Example: The *gating issues* surrounding Apple's return to profitability are low market share and a lack of public confidence.

GROK ***v.*** [from science fiction] To comprehend. Example: I don't quite *grok* what you mean by coach class, Steve. I've only ever flown in first.

LINK ***v.*** [Old Apple slang, from AppleLink, Apple's internal email system] To send email. Example: I'll *link* you the report after lunch. ***n.*** An email message. Example: Did you get the *link* from Sculley?

OFFLINE ***n.*** Out of the current conversation. Example: Let's take this conversation *offline;* we can dish rumors after the meeting.

USER HEAD GAP ***n.*** User error. Example: Tech support considered the call from a guy who broke his Mac's coffee cup holder a severe case of *user head gap.*

get info

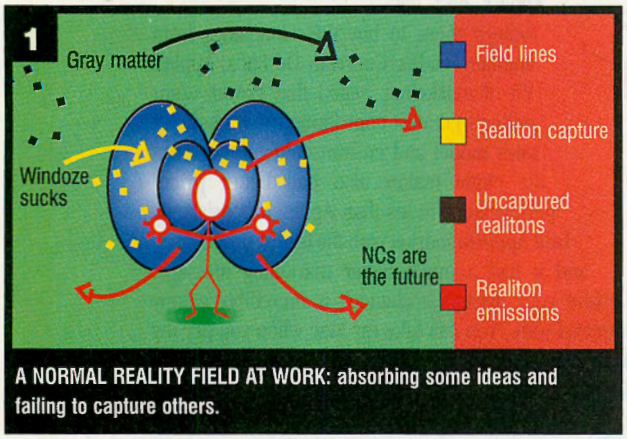
MacADDICT LAB

Special Report

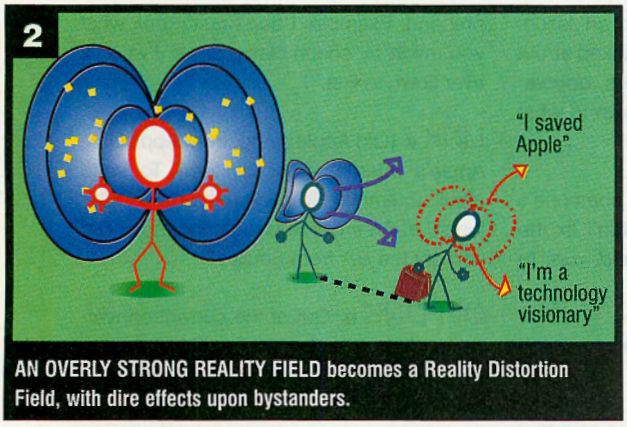
The Reality Distortion Field explained: Revealed at last, the science behind Steve Jobs' charismatic aura

You've read about it. You've heard about it. Maybe you've even experienced it and, thus, realize that it's not just some idle figure of speech but a real, quantifiable physical phenomenon. But up until now, you haven't understood how Steve Jobs' famous Reality Distortion Field really works.

Here at MacAddict Lab, we're committed to the belief that nothing can be truly understood until it has been studied, analyzed, benchmarked, and tabulated. Naturally, we felt the need to understand the Reality Distortion Field (henceforth RDF) on a more scientific level.



A NORMAL REALITY FIELD AT WORK: absorbing some ideas and failing to capture others.



AN OVERLY STRONG REALITY FIELD becomes a Reality Distortion Field, with dire effects upon bystanders.

But before we could take our measurements, we had to develop a working theoretical basis for our pioneering investigation into the new science of Realitometrics (patent pending).

Perhaps you've been laboring under the layman's misconception that your thoughts, knowledge, and ideas are stored inside your head. Not so! Rather, the fleshy organ known colloquially as the brain generates a reality field around your skull, whose arcing field lines capture and hold elementary conceptual particles called *realitons*. Everything from direct physical experience to abstract concepts and irrational opinions is manifested as a realiton, with corresponding quantum characteristics such as charm and eccentricity (see Figure 1).

The ability of the reality field to grasp and retain realitons depends on factors both individual and circumstantial. Depending on its movement vector, an incoming realiton may not be aligned with your reality field, or it may be too energetic for your field to snare (an effect perceived by the ignorant as an idea "going right over your head"). The accumulation of captured realitons that surrounds your head constitutes a cloud of perception that colors your world view and governs your decision making. Sources of realitons include direct observation of the world around you, the interactions between your existing realitons, and, of course, the pronouncements of other people.

In some rare cases, however, an individual may possess a reality field so strong that it actively interferes with neighboring fields. An overdeveloped reality field of this type is experienced by others as the famous RDF. In its most extreme form, the RDF not only distorts other people's perceptions by warping their reality field lines but also dampens their fields enough that the individuals' previously held notions are scattered to the four winds. Nature abhorring a vacuum, the depleted reality field seeks to replenish itself with whatever realitons are available. Provided the RDF transmitter has ideas proportionate to his or her charisma, he or she typically is happy to lend some of his or her own (see Figure 2).

Short-term exposure to a heavy RDF field merely leaves the subject dazed and discombobulated, as witnesses to Steve Jobs' Macworld Expo keynote can attest. But prolonged exposure can produce a long-term weakening of the reality field, rendering the subject with a tenuous grasp on reality and an inability to absorb new information. See the literature on J. Sculley and G. Amelio for case studies. Intriguingly, the subject's idea emission is not reduced—it may even increase, in a phenomenon identified as Incoherent Chief Technologist Syndrome (ICTS). —*MS*

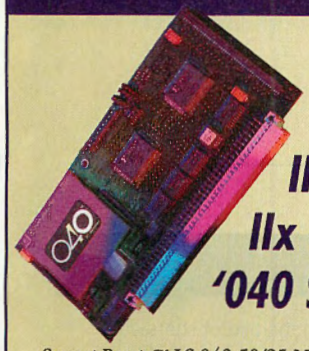
RDF Magnitude Analysis

Once we had a working model for the interactions of RDFs, standard reality fields, and realitons, it was comparative childs' play to construct an Analog Reality Field Magnitude Analysis Contraption (ARFMAC) and surreptitiously take readings on some well-known industry figures. Here are some highlights of our findings.

Subject	Field Strength[1]	Realiton Emission Quantity[2]
Steven P. Jobs	991.77	755.32
Bill Campbell[3]	735.88	699.40
Chris Anderson[4]	470.35	565.77
Guy Kawasaki	437.17	54.72
Cheryl England	267.89	174.15
William H. Gates III	156.25	65.08
Steve Wozniak (control)	100.00	100.00
Gilbert F. Amelio (c.1995)	91.04	255.97
Gilbert F. Amelio (c.1997)	11.70	328.51

[1]As measured in Standard Reality Field Flux Units (SRFFU)
[2]As measured in Mean Realiton Emissions per Second (MREPS), this serves as a working measure of the subject's own idea generation rate
[3]CEO of Intuit, Apple board member
[4]President of Imagine Publishing

Run Your Mac Faster and Save!



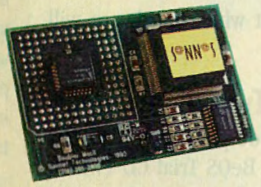
Accelerate Mac LC, LC II, Color Classic, IIci, IIsi, IIvx, II, IIcx, IIx or Performa 600 to '040 Speed Starting at $199

Sonnet Presto™ LC 040 50/25 MHz accelerators increase Mac LC, LC II or Color Classic performance 470% as fast as a stock machine (processor performance, MacBench2). Use RAMDoubler or Virtual Memory to break the 10MB barrier with the Presto LC (except Mac LC). The Presto LC is only $199, or with hardware Floating Point Unit (FPU) $249.

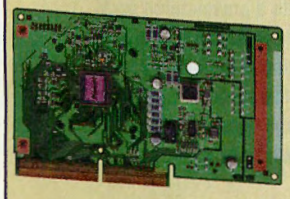
The 80/40MHz version for the Mac IIci, IIsi*, IIvx, II*, IIcx*, IIx or Performa 600 increases processor performance by 300-500%. The 80/40 MHz Presto at only $299 includes 128K level 2 cache, or $399 with FPU too.

Prestos are 100% application software compatible and run through System 7.6.1. System 8 support is planned for October 1997. The Prestos are easy to install in the Macs' processor direct slot or socket. (*Adapter required)

Allegro's Fast 68030s Give New Life to Mac SE, II, IIx, LC, LC II, Color Classic from $99



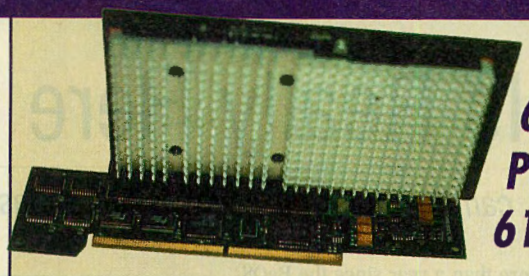
Give your older Mac more muscle. Sonnet Allegros™ are packed with features at bargain prices. The 33MHz Allegro LC for the Mac LC, LC II, Color Classic doubles your cpu speed, adds 16K level 2 cache and includes an FPU–all for only $149. The 33MHz Allegro SE increases performance 460%, includes an FPU and 4 SIMM slots to expand memory up to 16MB for a bargain $199. Allegro Mac II, IIx models double '030 speed to 33MHz for a mere $99.



PPC Processor Cards

150MHz 604	$179
200MHz 604e	$499
233MHz 604e	$799
360MHz 604eMP	$899

Give your Power Mac 7300, 7500, 7600, 8500, 8600, 9500, 9600, PowerTower, PowerWave, PowerCenter, SuperMac J700 or S900 series a PowerPC 604/604e upgrade. These power-packed upgrades are 100% compatible with your existing software and hardware. Add multiprocessing for super-fast Adobe Photoshop, Premier, AfterEffects, and 3-D rendering. Add a 1MB cache card and double your performance! MP multiprocessing by Daystar Digital.



132MHz 604 for PowerMac 6100...$399

New! The Sonnet Crescendo™ accelerator speeds a Power Mac 6100 or Performa 611X to run as fast as the original Power Mac 9500! Upgrade the tired 60 or 66 MHz PowerPC 601 processor to a 120 or 132 MHz PowerPC 604 CPU, respectively. The Crescendo upgrade plugs into the PDS slot for easy user installation. Run System 8 and all applications faster than you ever thought possible for much less than the cost of a new machine.

Run the Fastest Quadra Ever! 100/50 MHz is Faster than 840AV

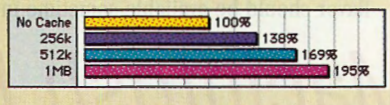
Only $399

Plug the Sonnet QuadDoubler™ into a Quadra 610, 660AV, 700, 900, or Centris 610*, 660AV, 650 and run virtually twice as fast as before for only $399. The QuadDoubler is System 8 compatible! Just plug the QuadDoubler into your CPU socket and power up your Mac. A CPU extraction tool is even included to simplify installation. The QuadDoubler includes a Floating Point Unit for superfast rendering or calculations. *The Centris 610 QuadDoubler runs at 80/40 MHz and is value-priced at $299 (without FPU $199).

Add Math Coprocessor to 68040 Macs & PowerBooks

Give your Quadra, Centris, or PowerBook 520/540 a math coprocessor for rendering, Photoshop, CAD, or other Math intensive applications. 25MHz 68040 $125*, 33MHz 68040 with heat sink $169*. Add a full 66/33MHz 68040 with FPU to your PowerBook 520 or 540 for $199*. This upgrade also speeds 520 to 66/33MHz 540 performance. Call for PB190, Duo280 or 68882 FPU. *68LC040 trade-in required.

Cache Speeds!



PowerMac with 1MB cache runs twice as fast as cache-less (200MHz 604e, MacBench 4). We build 'em. Resellers call for volume pricing.

256K	6100/7100/7200/7500/8500	$49
512K	7200/7300/7500/7600/8500/8600	$69
1M	7200/7300/7500/7600/8500/8600	$149
256K	6360/5400/5500/6400/6500/StarMax	$65
512K	6360/5400/5500/6400/6500/StarMax	$95
1M	6360/5400/5500/6400/6500/StarMax	$199

"The smartest way to bump performance!"

MasterCard

SONNET™ SONNET TECHNOLOGIES, INC.
18004 Sky Park Circle, Irvine, California 92614
714-261-2800 Fax 261-2461 sales@sonnettech.com

800-786-6260
http://www.sonnettech.com

VISA

VISA and MasterCard no surcharge. We used to have a surcharge; we don't anymore. Government, corporate and education P.O.s welcome. Albino tests every product thoroughly before we ship it to you. Whenever he is not attending to quality, he is teaching his young sons to play soccer. One year limited warranty on all products. If you step on it and break it we limit the warranty, otherwise we don't limit it too much. All returns require an authorization and are subject to a restocking fee. ©1997 Sonnet Technologies, Inc. Sonnet, the Sonnet Logo, Allegro, Crescendo, Presto and QuadDoubler are trademarks of Sonnet Technologies.

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Be Is Really Here Now

You, too, can find out if the BeOS is full of Gassée

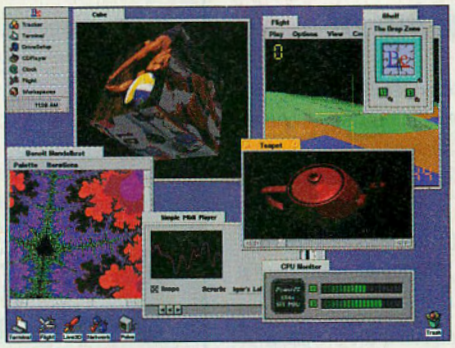
It has been more than a year since the BeOS was first seen running on a PowerPC-based Power Macintosh (where it seems everyone wanted to try it out), and now it's finally available to the masses—even though Apple bought the company of another former exec. Here's a look at what Be is calling the media OS.

What's New What isn't new? Oh, sure, the BeOS still has its buzzword-compliant, preemptive multitasking, multithreaded blazing speed, but there's a lot in the software that's new. The BeOS Preview Release has a new 64-bit file system, OpenGL for graphics, Unicode support, a Finder-like interface (called the Tracker), and OpenDoc-like component technology (called Replicator technology). Also, Metrowerks generously provided Java for the BeOS through its CodeWarrior Lite product.

GET FREE BeWare at ftp://ftp.be.com.

Can I Use It? That depends. If you own pretty much any 603- or 604-based Mac or Mac compatible (except for much of the Performa line or PowerBooks), you're probably golden. Otherwise, you'll need to either upgrade or just go without.

Goofy Pink Suits Power Mac owners aren't the only ones who can enjoy the BeOS. Be has shown a version of the BeOS for Intel-based computers. Applications written for the PowerPC version of the BeOS just need to be recompiled to run on the Intel BeOS. The Intel flavor should be available sometime in January 1998. Be hasn't said yet which hardware will be supported.



IT LOOKS A LOT MORE MAC-LIKE, doesn't it? Besides being amazingly fast and responsive, the BeOS has a trash can with a liner.

Buy One, Get Two Free So you want your own Be copy, do ya? There are a few ways you can get it. The BeOS Trial CD (which includes the BeOS and some electronic documentation) was freely available at August's Macworld Expo, and it has been bundled with various products and magazines, so you should be able to find it somewhere. If you want more, though, you can spend $9.95 to get the trial CD and a printed installation guide sent to your door. For the deluxe package, spend $49.95 on the BeOS Full Package, and you'll get the preview CD, a printed installation guide, electronic documentation, a printed 200-page BeOS User's Guide, and two free upgrades to BeOS. To order, contact Be through the Be Web site (http://www.be.com). —*DR*

BeWare

Aside from the pile of shareware and freeware available for the BeOS from Be's FTP site (ftp://ftp.be.com), some commercial applications are starting to show up for the multimedia OS.

BE BASICS, BE STUDIO
COMPANY: BeatWare
CONTACT: 650-322-7290, http://www.beatware.com
PRICE: Be Basics, $69; Be Studio, $99
AVAILABILITY: Now

BeatWare shipped the basic applications used by most computer users: Be Basics, which includes a spreadsheet and a word processor; and Be Studio, which includes an image editor and a drawing program. Hard to do any real work without these programs.

SHÖWBOAT
COMPANY: rö design
CONTACT: 425-844-2921, http://www.rodesign.com
PRICE: Less than $100
AVAILABILITY: Expected August 31

Shöwboat combines 3D special effects and animations with a presentation package so that all your presentations will be multimedia sensations—that is, if your creativity is up to the power of Shöwboat (which will also soon be available for Windows 95 and Windows NT).

CHARLOTTE
COMPANY: Purity Software
CONTACT: 512-328-2288, http://www.purity.com
PRICE: $269.95
AVAILABILITY: Now

If you're looking for power in your Web server, look to Charlotte. This Web server takes advantage of the BeOS's speed and multithreaded nature, plus the application comes with a copy of the BeOS on the CD-ROM.

Macintosh Rules!

Wow! We had no idea when creating August's contest that you could make more than 8,000 words out of the letters in "Macintosh Rules!" That's what we get for letting you have all the vowels plus two *s*'s and seven other popular consonants. We set intern Matt King to work sorting through the hundreds of entries and comparing them with *Webster's New World Dictionary.* It was easy enough to weed out those of you who DIDN'T FOLLOW DIRECTIONS! Hello! We said *words,* not anagrams, silly! Anyway, Matt made it through and found our eight winners (who will receive Mac OS 8), but reading the dictionary must not have been his cup of tea, because he up and quit on us. Pierre LaBauve, Simon Szykman, Joe Rivera, Krystal Truckenbrod, Lyle Wickham, Benjamin LeClair, Bruce Macke, and Michael Piziak, we hope you're happy! —*KT*

The Simpsons™ VIRTUAL SPRINGFIELD™

It's Krusty's Kind of Town!

Welcome to Springfield! Enter a navigable 3D world of all things Simpsons. Go along with Homer as he stocks up on Duff Beer and Jerky King at the Kwik-E-Mart. Play games at the Noiseland Arcade or watch a flick at the Aztec Theatre. With over 50 locations, an original cast recording and the outrageous humor of The Simpsons, *Virtual Springfield* will make you feel right at home.

STREETS OF SPRINGFIELD
Go for a ride! Here's your chance to wander through the streets of Springfield.

MOE'S TAVERN
Mix a Flaming Moe, try out the Love Tester or listen as Bart makes prank phone calls to the rattled proprietor of Moe's Tavern.

AVAILABLE FOR
Power Mac CD-ROM Hybrid

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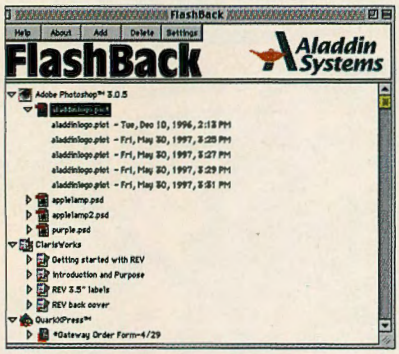
Four More Handy Thingies

Fall harvest of utilities looks to be a bumper crop

FlashBack You may have heard about Aladdin Systems' swell new utility earlier this year, but as 6Prime's Rev. FlashBack is a novel drag-and-drop backup utility. Simply drag the file that you want to track into the window, and FlashBack makes a copy of it. But that's not all. At configurable intervals, the program compares the version that you're currently working on with the version it saved and then makes a record of the changes. If you want to go back a couple of saves, simply drag the right document out of FlashBack's window, and the right version is reconstructed. Great for Claris FileMaker Pro databases, HTML documents, code control, and more! Aladdin is offering FlashBack at $29.95 through the end of the year. Contact: 408-761-6200, http://www.aladdinsys.com.



FLASHBACK SORTS YOUR BACKUPS by application and file.

Private File Also from Aladdin is the ultimate in personal security. It won't safeguard your apartment from burglary, but you'll be able to keep the IRS out of your MacInTax documents with 128-bit encryption. See our review (p71) for more details. Sorry, Private File is not available outside the United States yet because of silly cold war restrictions. Yup, Private File is considered munitions.

Speed Doubler 8 As the name implies, Connectix Speed Doubler 8 was designed to work with Mac OS 8. Sure, the new Finder is multithreaded and native, and it performs copies in the background. But you still get slowed down by nonnative code elsewhere. To sweeten the deal, Connectix added a couple of utilities that speed your use of your Mac. Keyboard Power lets you navigate application menus via the keyboard, and Hot Keys adds simple macro capabilities. If you bought Speed Doubler after June 1, you can get a free upgrade. Contact: 800-950-5880, http://www.connectix.com.

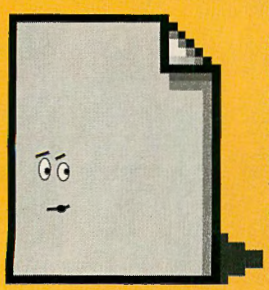
LiveGreetings Also due this fall from Connectix is LiveGreetings, a multimedia greeting card generator. Although Connectix has tried its hand in the past at a program to make cool multimedia greeting cards—think QuickCards—this version looks like it could be a winner. —*KT*

GET READY FOR off-key Christmas carols sung by your not-so-loved ones.

Find the Hidden File

Apple isn't the only company that keeps secrets. In fact, we've got a few doozies of our own right here at *MacAddict*. For example, you probably didn't know that Jennifer Gwirtz sneaked out of the office recently for a secret, totally unpublicized root canal. Nor did you know, we're guessing, that Cheryl England has been in negotiations for the last several weeks to buy her very first "real" house, in an undisclosed San Francisco location.

We've stashed away even bigger, better clods of this type of dirt (you'll need ResEdit to see them) in hidden files on The Disc. We've included several secret decoy messages to throw you offtrack, but if you can find "the winner," you could win your own copy of Private File, Aladdin Systems' new cross-platform encryption software. Once you've uncovered the real message, send us a letter telling us where you found it—be very specific—along with your name, address, and phone number to Private File, *MacAddict*, 150 North Hill Drive, Suite 40, Brisbane, CA 94005, or submit it on our Web site at http://www.macaddict.com/contest. Due to antiquated export restrictions, this contest is open to U.S. residents only. The winner will be randomly chosen from correct entries submitted by November 15, 1997. The clock is ticking.... —*NE*



REASON 32

WHY THE MAC IS BETTER THAN A PC

Installing System software is easier. When you install Mac OS 8, it recognizes old preferences, even Finder preferences from System 7.6. Every time you reinstall Windows 95—which some people do three to five times per week—you have to reinstall all your drivers and update all your system profiles. (Thanks to reader Dave Ullmann.)

The MacAddict Index

Value in dollars of Microsoft stock held by William H. Gates III as of August 25, 1997: 38,522,754,270

Approximate number of copies of Mac OS 8 sold in first two weeks of availability: 1,200,000

Approximate number of copies Apple expected to sell during this period: 300,000

Estimated retail price in dollars of Mac OS 8: 99

Number of copies of Mac OS 8 that William H. Gates III could purchase: 389,118,730

Approximate maximum number of Apple employees working simultaneously on Mac OS 8: 500

Approximate number of Apple employees working on Copland prior to its cancellation: 500

Number of lines of code in the Mac OS 8 Finder: more than 1,000,000

Dollars per year offered by UMAX Computer to have the Oakland (California) Coliseum renamed after itself: 1,900,000

Approximate number of years for which William H. Gates III could purchase naming rights to the Oakland Coliseum: 20,300

Approximate number of stock options held by Apple employees: 20,000,000

Approximate percentage of Apple held by its own employees in the form of stock options: 16

Pounds of gunpowder used to destroy a Macintosh (see http://pgd.scvnet.com/mac): 1

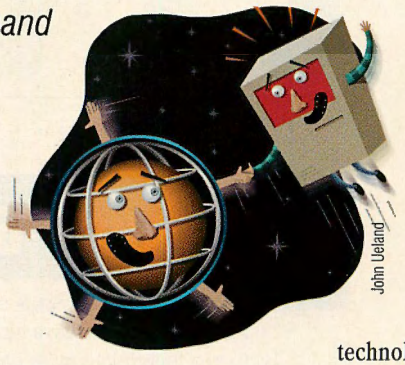
Approximate price in dollars of a pound of gunpowder: 9

Approximate number of Macs that William H. Gates III could blow up with gunpowder: 4,300,000,000

Sources may be found on the *MacAddict* Web site. —*MS*

Rev Up Your Net Access

Macs can strike up the broadband



get info

Would you like to surf the Web at twice the speed? Ten times? A hundred times? A bevy of high-speed access technologies are springing up for Mac addicts who feel the need for speed in cyberspace, but some may be offlimits because of ancient PC interface cards that they use.

The easiest way to double your pleasure is to install a 56Kbps modem. For the past year, these modems have been split between two standards, U. S. Robotics' x2 and Rockwell Semiconductor System's K56 Flex, which required both consumers and Internet service providers (ISPs) to choose between competing hardware and risk picking the wrong one. The 56Kbps modems may represent the bottom of the high-speed food chain, but they're the easiest to install.

The next step up the ladder is dual-channel Integrated Services Digital Network (ISDN). Not everyone can get ISDN, but most urban areas are covered. Cable modems can transmit data using the coaxial cable that your cable television service uses, but the cable company must first upgrade its networks. As a stopgap, many cable companies are introducing *one-way* cable modems, which require you to use a modem connection for sending data back to the Internet.

Asymmetric Digital Subscriber Line (ADSL) works over existing phone wires. ADSL usually interfaces via a PCI card. Finally, a new technology has emerged that allows apartment building dwellers to convert the phone networks in their buildings to an Ethernet network. CAIS Internet is selling the system as OverVoice and is selling PairGain as EtherPhone, but you'll still need to have a telephone company or ISP install the service in your building. Local Multipoint Distribution Service (LMDS) and Multichannel Multipoint Distribution System (MMDS) are two high-speed wireless technologies.

For a quick fix, 56Kbps modems should provide a simple answer once the competing standards are resolved. ISDN is widely available now, but it is relatively expensive. In the next two years, the cable and telephone companies should be providing residential high-speed access in at least trials in most major American cities. If you can't wait, try out an LMDS or MMDS wireless solution. Those of you in remote regions, though, may have to wait until some Mac-friendly partner brings DirecPC to the Mac. —*Ross Scott Rubin*

Sorting Through the Crap

High-speed technology	Provider	Speed (vs. 28.8Kbps modem)	Interface	Price per month[1]
56Kbps modem	Any dial-up ISP	56Kbps (2X) (Theoretically—most 56Kbps modems get around 40 to 45Kbps due to line noise)	Serial port	$19.95
ISDN	Local telephone company	128Kbps (4X)	Serial, PCI	$30 to $60 (varies with usage, provider)
DirecPC	DirecPC	400Kbps[2] (14X)	ISA card[3]	$39.95 (for use evenings and weekends)
LMDS	CellularVision	500Kbps[2] (17X)	ISA card[3], PCI[4]	$49.95
ADSL	Local telephone company	6Mbps[4] (208X)	PCI	Still in trial; expected between $40 and $50
MMDS	CAIS Internet	10Mbps[2] (347X)	Ethernet	$49.95
OverVoice or EtherPhone	Local telephone company	10Mbps (347X)	Ethernet	Still in trial
Cable modem	Cable company	10Mbps[5] (347X)	Ethernet	Still in trial; expected between $40 and $50

1 Estimate; does not include equipment or installation
2 Requires modem connection for sending data to Internet
3 No Mac version available
4 Cross-platform PCI card in development
5 Estimated for computer interface or consumer pricing; some cable modems require modem connection for sending data to the Internet; ADSL can return data as fast as 640Kbps

cravings

You'll need an asbestos oven mitt to grab ahold of these hot products.

Olympus D-600L

Olympus

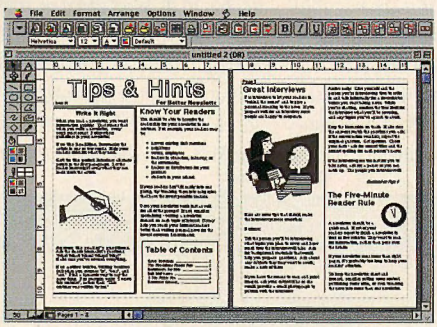
Fed up with those mediocre images that today's digital cameras deliver? Oh, sure, they try, but the image quality has always lacked something. Pixels, mostly. And who has that much spare cash? The Olympus D-600L will cure your image-loving blues. For a mere $1,299, the D-600L delivers images at 1280 x 1024 resolution—over twice that of traditional 640 x 480-capable digital cameras. The D-600L also has a 3X zoom lens which goes from 36mm to 110mm focal lengths, and its macro capability lets you take pictures from a mere foot away. Images are stored on SmartMedia floppy disk cards, which can hold 4 to 50 images each, depending on the image resolution. The D-600L also has a built-in LCD screen for image viewing, date and time stamp, several different flash modes, and stop-action capabilities that let you capture nine frames in a second. To get your very own D-600L, contact Olympus at 800-347-4027, or point your browser to http://www.olympus.com.

DROOL OVER THESE DIGITAL IMAGES.

ClarisWorks Office

Claris

Efficiency is your middle name. You've never quite forgiven dear old dad for that, his misguided attempt to pass on the family neurosis—father to son, William Worker Drone Mitchell to Samuel Efficiency Mitchell. Truly, though, you've taken your name to heart, holding in high regard applications that do lots of things with few system resources. Nothing, though, stands in higher regard in your eyes than ClarisWorks Office. For a mere pittance of $99, ClarisWorks Office does word processing, drawing, spreadsheets, databases, Web page construction, and presentations, and it has more than 200 premade documents (including 60 business templates) so that you can get to work instead of puttering the day away. ClarisWorks Office is a model of efficiency when it comes to Mac resource use, too, occupying just 68MB of hard disk space (which includes templates and 900 clip-art images) and being able to operate in 8MB of RAM. For your own taste of computing efficiency, call Claris at 800-544-8554, or go to http://www.claris.com.

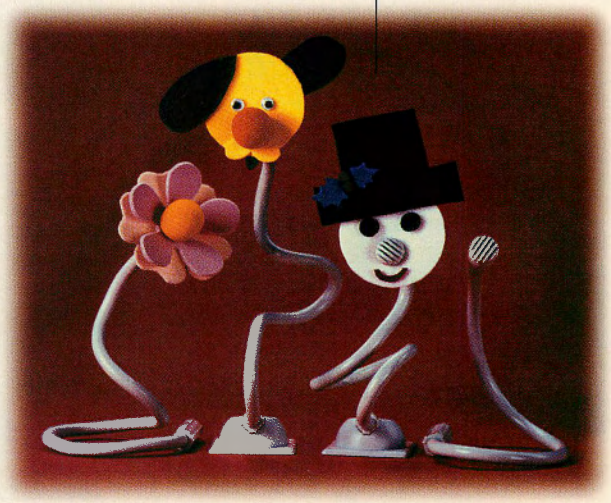


THE OTHER OFFICE SUITE.

Mic 'n Friends

MidiLand

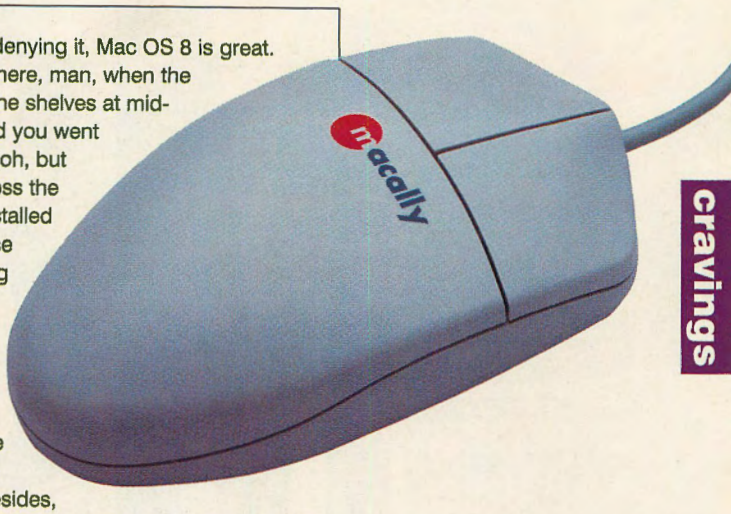
Your therapist, who now refuses to be alone in the same room with you, has come up with a great way to continue your treatment. By talking to your Mac, perhaps you may be able to make a breakthrough. But that PlainTalk microphone has always seemed so impersonal. Don't despair. MidiLand offers the Mic 'n Friends microphone accouterments, and with their cute faces, it'll be easy to talk to them. For a mere $29.95, you can choose a fuzzy puppy, a smiling snowman, or a gentle flower—nothing mean or angry here. You also get the Free-D microphone mounted on a flexible gooseneck, which will pipe all those hours of rambling into your Mac. With a frequency response of 100Hz to 16KHz and a sensitivity of 47dB to 4dB, those ramblings should be crystal clear. Contact MidiLand at 909-592-1168, or go to http://www.midiland.com for your own Mic 'n Friends microphone and accessories.



WARM FUZZIES FOR YOUR AUDIO INPUT.

2 Button Mouse

Macally



There's no denying it, Mac OS 8 is great. You were there, man, when the first copies hit the shelves at midnight in your local MacCompuTownUSAHead, and you went straight home to install it, ignoring stoplights and crosswalk rules (oh, but you should have seen the look on that scruffy GenXer trying to cross the street). After writing checks to cover your speeding tickets, you installed the newest fruit from Apple, then you discovered something. To use one of the new OS's best features, you have to Control-click. Being a mouse kind of person, you decide that this is not for you.

A HELPMATE FOR MAC OS 8.

Instead, you invest $49 in the Macally 2 Button Mouse. Designed with Mac OS 8 in mind, this twin-button wonder lets you click or Control-click without touching a keyboard. But you're not just stuck with click and Control-click; you can program the mouse driver for other kinds of clicks as well. Contact Macally at 626-338-8787, or go to http://www.macally.com to get more information. Besides, with its temperature operating range of -50 to 131 degrees Fahrenheit, you can take it with you on your Death Valley/Mt. Everest retrospective trip.

PL-300 Display Tablet

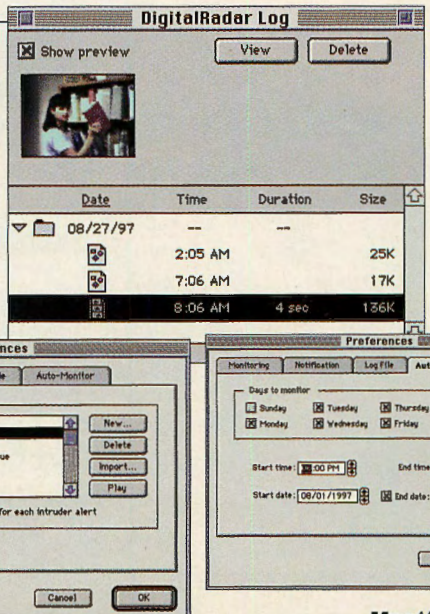
Wacom Technology

Although you've managed to become one of the most renown tracers in the business—you can trace a face in less than a minute—you've always had to deal with the problems created because you choose to do your work electronically. And that's not easy, buddy, especially when everyone else gets to use onion-skin paper and a pencil and you're stuck with that *lousy* mouse and monitor. Not that you're bitter. Buck up, little camper. Wacom has the tool for you: the PL-300 Display Tablet. Combining an LCD display and a drawing tablet, the Display Tablet lets you write directly on an image, which is a real boon for your budding tracing career—that is, if you can get someone to pay you for your work. The PL-300 is an 800-x-600-pixel, 10.4-inch active-matrix display, capable of displaying up to 256,000 colors. It comes with a pressure-sensitive eraser pen (with 256 levels of pressure) that has a resolution of 508 lines per inch. For only $26.99, tracing greatness can be yours, but only if you contact Wacom Technology at 800-922-6613, or point your browser to http://www.wacom.com.

ELEVATE YOUR ART TO NEW HEIGHTS.

Digital Radar

Connectix



You've always had the feeling that the little video camera sitting on top of your monitor is watching your every move. It's so smug in its eggshell-white plastic case with that small glass aperture that just doesn't *blink*! Perhaps you aren't imagining things, contrary to what your mother has been telling you all these years. Perhaps someone installed Digital Radar from Connectix on your Mac. For a mere $29.95, the unknown observer (or saboteur, perhaps) can have Digital Radar watching via a video camera, recording video any time it detects motion. Those clips can be saved on a network volume, so you may never see those surreptitious videos. Digital Radar could also be set to play a greeting or sound an alarm when it detects movement in front of it. So, what to do? Perhaps you could use the camera against "them" somehow. Or you could always just disconnect the camera, but why destroy a good story? To discover more, call Connectix at 800-950-5880, or surf to http//www.connectix.com. *—David Reynolds*

MODERN MOTION DETECTION.

secrets

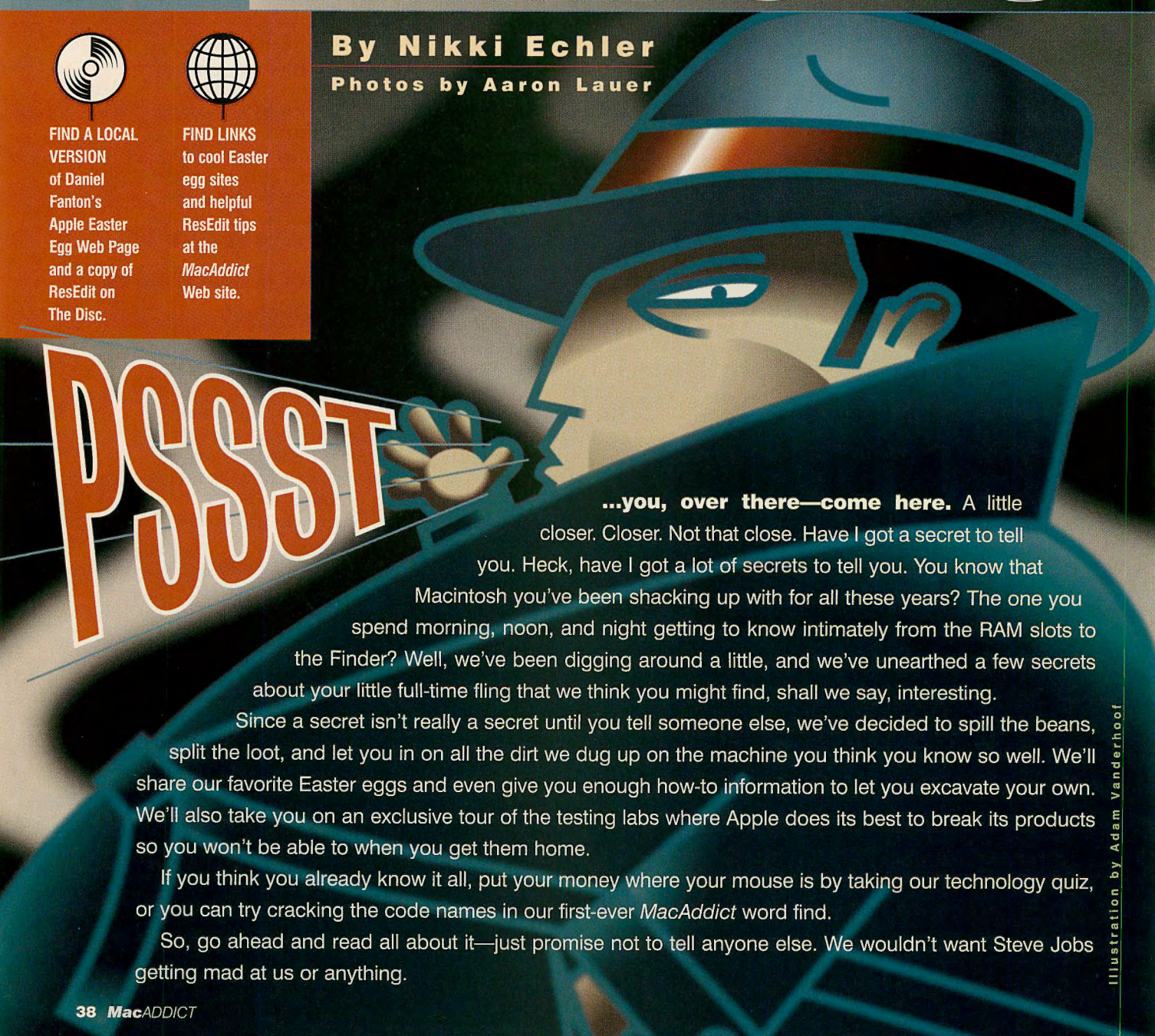
THE Mac'S

FIND A LOCAL VERSION of Daniel Fanton's Apple Easter Egg Web Page and a copy of ResEdit on The Disc.

FIND LINKS to cool Easter egg sites and helpful ResEdit tips at the *MacAddict* Web site.

By Nikki Echler

Photos by Aaron Lauer



PSSST

...you, over there—come here. A little closer. Closer. Not that close. Have I got a secret to tell you. Heck, have I got a lot of secrets to tell you. You know that Macintosh you've been shacking up with for all these years? The one you spend morning, noon, and night getting to know intimately from the RAM slots to the Finder? Well, we've been digging around a little, and we've unearthed a few secrets about your little full-time fling that we think you might find, shall we say, interesting.

Since a secret isn't really a secret until you tell someone else, we've decided to spill the beans, split the loot, and let you in on all the dirt we dug up on the machine you think you know so well. We'll share our favorite Easter eggs and even give you enough how-to information to let you excavate your own. We'll also take you on an exclusive tour of the testing labs where Apple does its best to break its products so you won't be able to when you get them home.

If you think you already know it all, put your money where your mouse is by taking our technology quiz, or you can try cracking the code names in our first-ever *MacAddict* word find.

So, go ahead and read all about it—just promise not to tell anyone else. We wouldn't want Steve Jobs getting mad at us or anything.

Illustration by Adam Vanderhoof

Hidden Secrets Revealed!

Entering the Labs

Ironically, Apple's best kept secrets aren't locked away in a deep, dark vault behind a 10-ton steel door—they're sitting on the store shelves just waiting to be noticed. Sure, Apple turned its wallet inside out telling you what a difference 8 makes, but it didn't tell you who and what made Mac OS 8 so great.

Nor did Apple tell you the truth about why you should buy any of its other products. So, here it is: Apple makes the highest quality products on the market because it just tests the hell out of them.

Not so long ago, Apple was getting creamed in the press for shipping buggy (not to mention flammable) products in its rush to get as many hot products into stores as fast as it could slap them together. As part of the company's turnaround, the quality control folks (bravely led by Apple Vice President Mike Connor) were finally allowed to take control. Now, if an Apple product doesn't meet their quality standards, it doesn't get shipped until the problem is fixed. Period.

How are they doing? So far they've managed to ship three versions of the Mac OS, on time, on budget, and with very few bugs. Not bad.

Before being released to the public, each Apple product, whether it's a new operating system or a mouse, goes through a grueling series of tests in which Apple engineers lovingly try to break it, fix it, and then break it again. Several teams spread over several floors within several buildings at Apple test for integration quality and reliability of each and every component within a machine or OS. Once they have a product that's close to completion, they seed it out to a squad of volunteer beta testers who pound on it some more. Take a look at the following never-before-published photos and statistics of Apple's testing procedures and see for yourself why Apple has the most reliable products around.

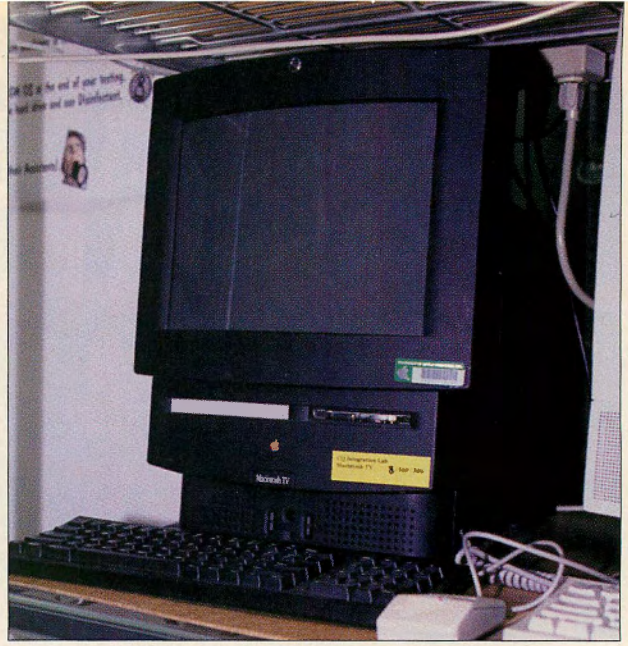
The Integration Lab

The Integration Lab, one of Apple's most closely guarded secrets, plays host to at least one of every Macintosh and PowerBook model ever made, making it the closest thing to a Macintosh museum that exists. Although the lab is used mainly for testing software

THE LAB LOOKS A LITTLE DESERTED now, but you have to wait in line for a turn at a machine during the weeks preceding a big OS release.

and expansion cards on existing machines, it also comes in handy for what's called *regression testing*—what engineers resort to when their product won't work on the latest hardware. If the newest hardware isn't working with the newest product, engineers start testing on older machines to locate the missing link that's causing the conflict.

No prototype machines are allowed in the lab, which holds about 320 Macs at any given time, including at least three of every Power Mac, two of every 68040 machine, and one of every 68030 machine and earlier. The lab is available to only select engineers.



THEY EVEN HAVE A MAC TV—the only Mac released in the United States to come in a black case. (The Performa 5200 was black, too, but was released only in Japan, while the black version of the Performa 6400 was available in Europe. If you know of any other black Macs in existence, let us know. We want one.) Not exactly what you'd call a hit, only 10,000 Mac TVs were made before the model was discontinued.

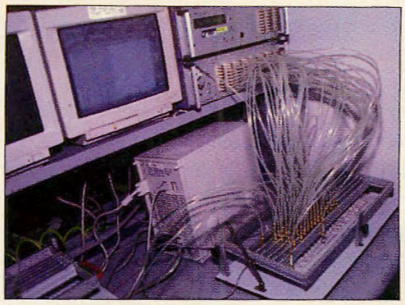
The Reliability Lab

Unlike in every other air-conditioned area in Apple's buildings, people actually sweat here as hardware gets toasted in the name of reliability and long life expectancy. Engineers speed up the effects of time by heating up, cooling down, and shaking around the hardware in their attempt to ferret out and fix failures that otherwise wouldn't show up for several years down the road (usually after your warranty runs out). The lab also tests for long-term accuracy by putting keyboards, trackpads, and mice through hours of tapping, scrolling, and clicking.

EXCLUSIVE TOUR!

A MACHINE CLICKS EACH MOUSE BUTTON repeatedly, in different spots, and waits for the mouse to accurately report the click before it resumes testing.

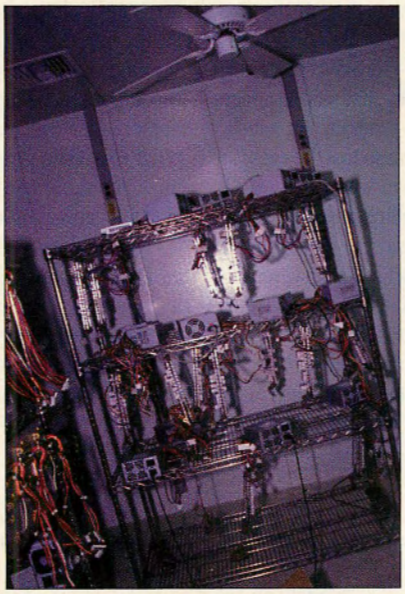
THESE LARGE OVENS are used for Four Corner Testing, which puts each desktop machine through a painful series of temperature changes, including cold-wet, cold-dry, hot-wet, and hot-dry. "Wet," in this case, equals 90 percent humidity, "dry" means 10 percent humidity, "hot" equals 104 degrees Fahrenheit, and "cold" goes down to a cool 58 degrees Fahrenheit.



KEYBOARDS ARE TAPPED 10 million times, and trackpads and mouse buttons are hit 5 million times by these machines to test for reliability. A machine also tests keyboard accuracy by typing and retyping the phrase "The quick brown fox jumps over the lazy dog" for two hours at 200 words per minute—some tests can go as high as 600 words per minute—and recording the results to see if the keys continually record the appropriate information.

APPLE BAKES 80 to 130 desktop systems for 1,000 hours each at 104 degrees F. This helps Apple reach 90 percent confidence that the Mean Time Between Failures (MTBF) of any model will exceed 30,000 hours. Power supplies get hotter: about 125 degrees F. for about two weeks.

PLASTICS START TO MELT when temperatures rise above 185 degrees F. Despite its Dali-esque appearance, this monitor still works.



MOUSE ENCODERS AND BALLS are tested for up to 50 miles in the 50-Mile Mouse test. A group of mice are moved around at a speed of 6.5 inches per second for about two and a half weeks.

IN RANDOM VIBRATION TESTING, hardware is shaken around in a series of three 10-minute sessions on each of the machine's three axes at extremely high levels of vibration. This test is used to accelerate life conditions in desktop machines, floor models, keyboards, and mice.

Customer Quality Feedback

Testing an Apple product begins in-house as soon as a working prototype has enough parts assembled that it can be disassembled by eager engineers. However, as soon as that pile of parts resembles a shipping product, it gets seeded out to Apple's Customer Quality Feedback (CQF) group for an end-user reality check.

These "customers" work for free, are required to devote at least four hours a week to testing, must have experience using Macs in the areas of expertise relating to Apple's needs, and must be at least 18 years old to participate, or have a parent or legal guardian sign nondisclosure agreements on their behalf. If you're interested in helping Apple catch bugs and improve features in products that we here at *MacAddict* don't even know about yet, you can fill out an online application at http://www.cqf.apple.com. But consider yourselves warned: Although Apple is always looking for fresh blood to juice up its testing program, it already has 5,500 people waiting in line to become customers, and the requirements are pretty stiff.

Here is some CQF trivia (true as of August 4,1997—rates change daily):

* California has the most CQF customers (383).
* South Dakota and Arkansas tie for the fewest CQF customers (one apiece).
* All 50 states are represented in the CQF testing group.
* There are 1,359 U.S. sites and 173 non-U.S. sites.
* Apple's youngest CQF customer is 14 years old.
* Of the 11,574 total bugs found in Mac OS 8, CQF customers found 13.15 percent of them.
* CQF customers were first to report that the game Warcraft did not work properly on the PowerBook 1400. Blizzard Entertainment updated its drivers so the game would work with IDE drives.

Easter Eggs: Not Your Typical Holiday Treat

Put away your candy basket. The Easter eggs stuffed in your Mac are usually one of two varieties: a secret message hidden in program code that can be unearthed only with a program such as ResEdit, or a message, animation, or picture activated by a weird key combination.

Why all the secrecy? Programmers and engineers often like to sign the projects they've spent months working on by hiding personal messages, credits, or games in their code, a practice not officially condoned by Apple. If the eggs are found prior to shipping, they'll most often be yanked from the program, forcing egg makers to be extra sneaky. Only recently has Apple relaxed its Easter egg stance with a new policy that lets engineers keep their eggs in the program, as long as they tell Apple about them so that the eggs can be tested. (A big problem with some eggs is that they can cause conflicts resulting in system crashes, product delays, and megamoney losses to the company.) So far, however, not many engineers have lined up to spill their eggs, and the secrecy continues!

To help you lift the veil an inch or so, we've compiled a list of the top 10 Easter eggs you're likely to find on your Mac. Some are pretty new, while others have grown to legend status, but all are pretty darn cool. We scrounged up many of these eggs from your suggestions and a dip or two into the greatest Apple Easter egg Web site of all time, compiled by Daniel Fanton and located at http://members.aol.com/ixist/apple.html. Find a local version of his site on The Disc.

As we dove deeper into Apple's secret past, we uncovered five eggs that never made it in the final versions of software. For variety, we included five more eggs found in third-party programs we suspect you use, and for posterity, we tell you how to find your own darn eggs. *Bon appétit.*

Top 10 Apple Easter Eggs

1. The Crayons

Location: Mac OS 8

Crack the shell:

Step 1. Open the crayon color picker in any application. For example, you can open the Appearance control panel, click on the

Color button, then from the Highlight Color pop-up menu select Other..., where you can then select the crayon color picker.

Step 2. In the Date and Time control panel, move your clock ahead by several years; using 2010 works.

Step 3. Go back to the crayon color picker and witness the effects of time.

The egg: The crayons look worn down to nubs.

Egg extra: If you open Mac OS 8's color picker extension in ResEdit and check out STR# "Extra,"ID=3D-5749, you'll notice some strange names, including "Yes, I Surf Ohio," "I Don't Plan," "Stray Advice," and "Night Thigh Desire." Strange nicknames for strange people.

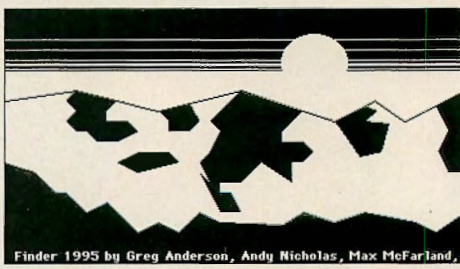
2. The Mountains

Location: Mac OS 8

Crack the shell: Go to the Finder's About Box by holding down the Option key and selecting About This Computer... from the Apple menu.

The egg: A 3D image of mountains (in color) provides the backdrop for a scrolling list of credits.

Egg extra: When you get to the end,



there's a list of Special Thanks with a slight break in it. After that break, the names in the list are of all the people on the Finder team who were laid off earlier this year.

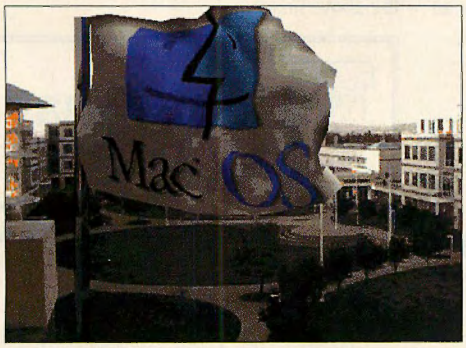
Past life: Follow the same steps in System 7.6 and you'll get the mountain range in black and white, with credits that scroll along the bottom of the image.

3. The Iguana Flag

Location: Power Macs only, System software up to but excluding Mac OS 8

Crack the shell: Type the text "secret about box" into a document in SimpleText, select it, then drag it to the desktop in the Finder.

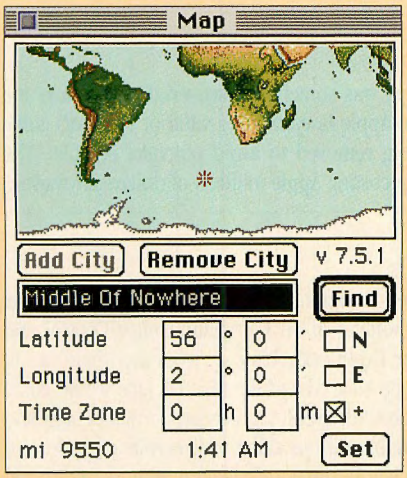
The egg: You see a full-color picture of the Apple Campus shadowed by a huge flag boasting a lizard and the words "iguana iguana powersurgius." The flag, which is whipping in the wind, will follow the direction of your mouse. If you are fast enough, you can rip the flag off the pole and watch it flutter to the ground.



Egg extra: If you hold down the P key while dragging the words "secret about box" to the Finder, the same image pops up, but the flag sports the smiling Mac logo.

Past life: If you're still working with System 7.5, try the same trick to trigger a lively breakout game that uses the names of the engineers as blocks.

4. The Middle of Nowhere



Location: Map control panel

Crack the shell: Type "Middle" in the Map control panel and click Find.

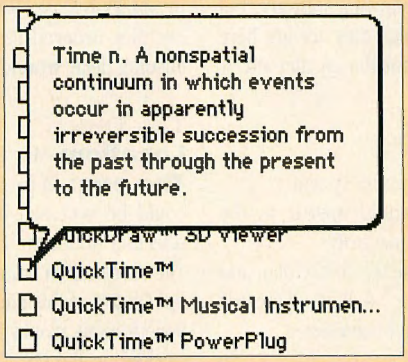
The egg: The map takes you to the Middle of Nowhere. We were surprised to find out that it wasn't Delta, Ohio, as we had first suspected.

Egg extra: Hold down the Option key and press Find to scroll through all the locations on the map in alphabetical order. Good for hours of geographical amusement.

5. The Hidden Meaning

Location: QuickTime

Crack the shell: Activate Balloon Help and run your cursor over the QuickTime file in your Extensions folder.



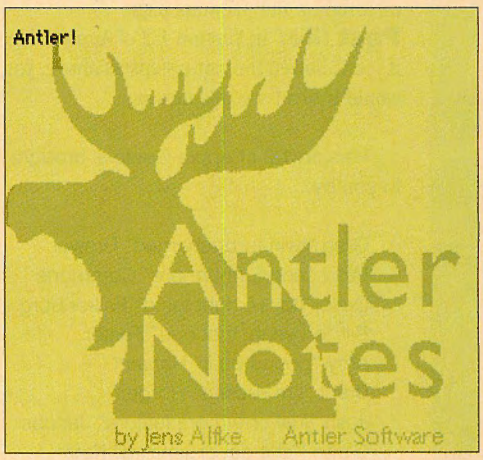
The egg: The balloon pops up a definition for time. Not exactly earth-shaking, but unexpected nonetheless.

Egg extra: When playing a QuickTime movie, hold down the Shift key and double-click inside the movie window to hear and see the movie play backward.

6. Sticky Moose

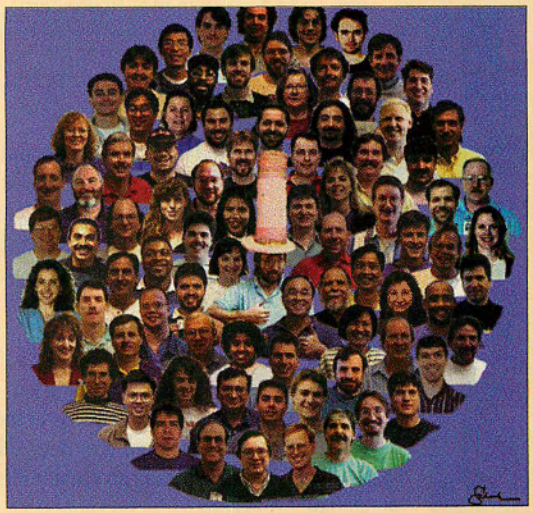
Location: Stickies

Crack the shell: Go to the Apple menu, and open up a brand-new, never-before-used Sticky. Type the word "Antler!" and hit Return.



The egg: You get an Antler Note decorated with a moose shadow.

7. The Secret ROM Image

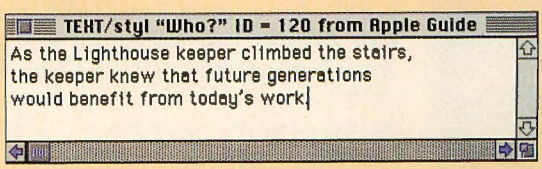


Location: Any PCI-based, desktop-model Power Mac

Crack the shell: Type "secret ROM image" into a draggable text document (a Sticky will do), select it, and drag it to the desktop.

The egg: You'll see a big, round picture of the engineers who helped to create the hardware and low-level drivers for PCI Power Macs.

8. Who?



Location: System 7.6, Apple Guide

Crack the shell: Use ResEdit to open AppleGuide, then open the TEXT

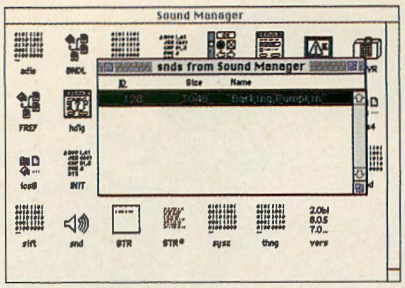
resource and double-click on "Who?"
The egg: You see the cryptic message pictured on the previous page.
Past life: In Version 1.2 of AppleGuide, if you followed the same steps as above, you would instead see this message:

Version 1.2 of Apple Guide is brought to you by:

Greg "twin-turbocharged" Brewer
Peter "and furthermore" Commons
Dave "do the right thing" Falkenburg
Bill "oh yeah, that one" Foster
Amy "pound on it" Hansen
Brent "I'm excited" Horger
Josh "just one more feature" Jacobs
Glenn "let's get organized" Katz
Sue "will do" Kuo
Brian "that's next on my list" Lawley
Dave "cursorman" Lyons
James "I'm in the chips" Miyake
John "follow me, I'm lost" Powers
Alex "you can quote me" Rosenberg

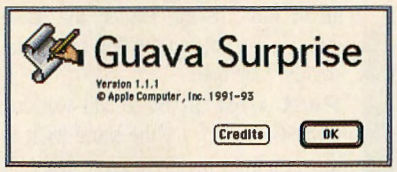
9. The Barking Pumpkin

Location: Sound Manager
Crack the shell: Open ResEdit and use it to dig through your Extensions folder until you find the Sound Manager. Open it. Then, open the snd resource. Once you're there, select Barking Pumpkin and then choose Try Sound from the snd menu in ResEdit.

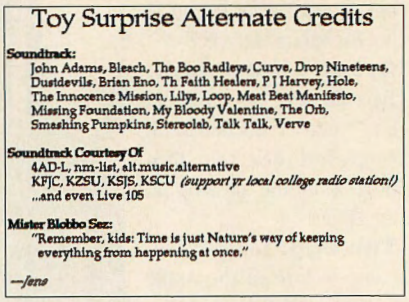


The egg: Your ears will ring with the deep woof of a barking pumpkin.
Egg extra: The system sound Sosumi, a sound-alike for "So Sue Me," was named that after an angry engineer was told he couldn't use his "Xylophone" sound as an alert beep, for fear of a potential lawsuit.

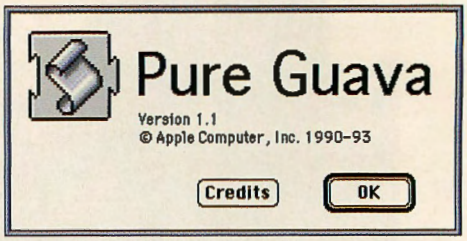
10. Guava Surprise



Location: AppleScript ScriptEditor
Crack the shell: Open the ScriptEditor and click on About ScriptEditor... from the Apple menu. Then, hold down the Control key and click on the program's icon. Click on the Credits button for more surprises.



The egg: The words "The Script Editor" are replaced by "Guava Surprise," the code name for AppleScript 1.1. If you click on the Credits button, you'll notice that the credits have changed to what you see in the above image.



Egg extra: If you follow the same steps as above, but click on About AppleScript... under the Apple Menu, you'll see the words, "Pure Guava," yet another code name for AppleScript 1.1.

The Forbidden Eggs

Our very reliable sources tell us that the following Easter eggs did at one time exist in prerelease versions of the following software, but for some reason or other were removed. Although they are not here with us today, we mourn them and honor them for the joy they surely would have brought us.

The Bouncing Apple

Location: System 7.5.3, rev. 2.0 for the Tanzania system
The egg: A bouncing, six-color Apple would appear in the Installer startup screen after several seconds of inactivity.
The crack: A middle manager discovered the egg by accident and demanded it be removed, saying it could be put in 7.6. When 7.6 came around, however, it wasn't put in because it hadn't been tested.

The Winking Mac

Location: Mac OS 8
The egg: At just the moment when the smiling Mac first appeared on your screen at startup, it would wink at you.
The crack: Apple was worried the wink might be offensive to other cultures and didn't want to risk hurting anyone's feelings.

Paula Abdul

Location: System software ROM (which one, we're not sure)
The egg: An engineer had hidden a picture of himself in some System software ROM. This might not have created the fiasco it did, had a poster of a scantily clad Paula Abdul not been in the background.
The crack: The egg was somehow discovered right before the product's release. When Apple lawyers got a whiff of what was going on, they ordered the egg removed to avoid potential lawsuits. The ensuing delay wound up costing Apple millions of dollars anyway.

The Fade

Location: Mac OS 8
The egg: In prerelease versions of Mac OS 8, a secret About box could be accessed by holding down Command-Option-Control and selecting About the User Experience Team... from the Apple menu. The screen then would be cleared and the Mac OS face would come up. On top of this background, oversized, pixelated icons of bugs and System icons would fade in and out along with credits of those who worked on the OS. The whole show took several minutes and would loop endlessly until the mouse was clicked or a button pressed.
The crack: Currently under investigation. May still exist.

Area 51

Location: MessagePad 120, Newton 2.0
The egg: In the original version of the Newton 2.0, Apple had included an entry for Area 51 (a site long linked with suspected alien coverups by our government) in the Time Zones application. If you were to choose Area 51 from the map, the Newton's icons would change to look like little aliens, flying saucers, and robots.
The crack: Right before the Newton 2.0 unit was to be released, a government-issue cryptographer working for the CIA was testing a

seed unit and discovered that the ultrasecret Area 51 was listed at the correct longitude and latitude. He complained to Apple, which rushed to cover up the egg with a software patch. The secret truth: We've heard it still exists. Oliver's Newton Easter Egg Page (http://www.mathcs.emory.edu/~ofross/newton/eggs.html) tells how to uncover the patch:

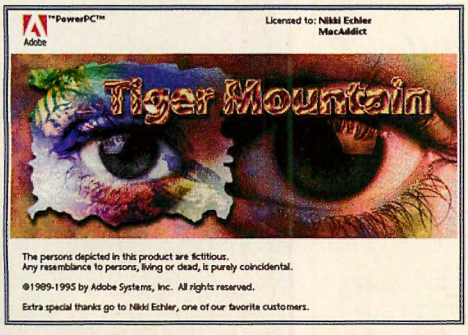
Step 1. Open the Extras drawer.
Step 2. Switch the folder of the Extras drawer to Storage.
Step 3. Tap on the icon Time Zones and press the Delete button. (Any cities you've added to your Newton list will be deleted as well.)
Step 4. Switch the folder of the Extras drawer back to "Unfiled icons."
Step 5. Tap on Time Zones.
Step 6. Tap near Las Vegas. Select Area 51 from the pop-up menu ,and look at the icons in Dates.
Step 7. To get rid of the icons, open the back of your MessagePad and press reset.

The Other Eggs

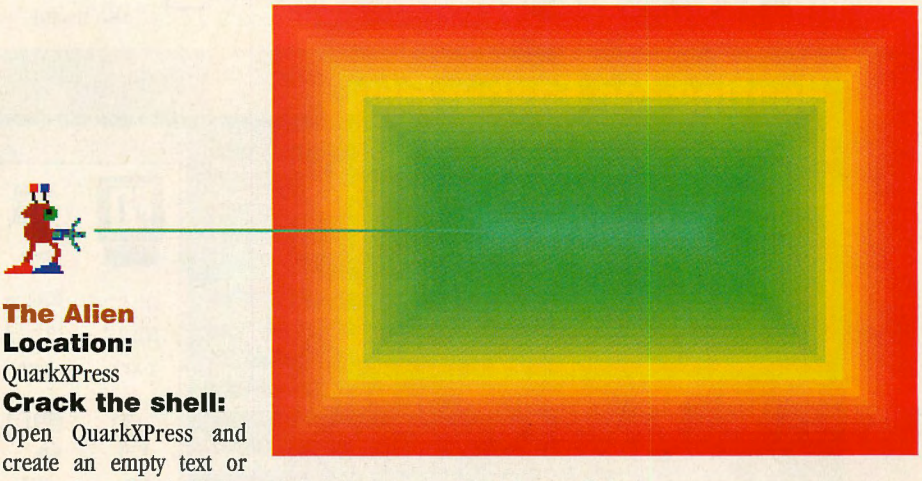
Easter eggs. They're everywhere. We're usually not this paranoid, but we harbor strong suspicions that Easter eggs have infiltrated almost every program you've ever used on your Mac, completely without your knowledge or approval. There probably are some rolling around, right under your nose, right now. Look, there they are.

The Cat

Location: Adobe Photoshop 4.0
Crack the shell: Hold down the Command key while selecting About Adobe Photoshop.
The egg: You get a wild picture of the Big Electric Cat (the code name for Photoshop 4.0) and all kinds of crazy credits.
Egg extra: If you hold down the Command key and click on the cat's nose, it makes a loud, disgusting belching noise.



Past life: Try the same trick in version 3.0 for an image of Tiger Mountain, some modified credits, and an extra special thanks to you.



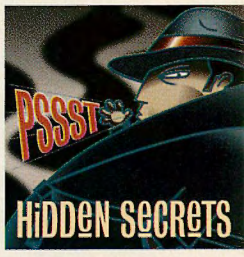
The Alien

Location: QuarkXPress
Crack the shell: Open QuarkXPress and create an empty text or picture box, then hold down Shift-Option-Command and press Delete.
The egg: Zip the Space Alien marches out and deletes your box for you in a brilliant rainbow display of colors.

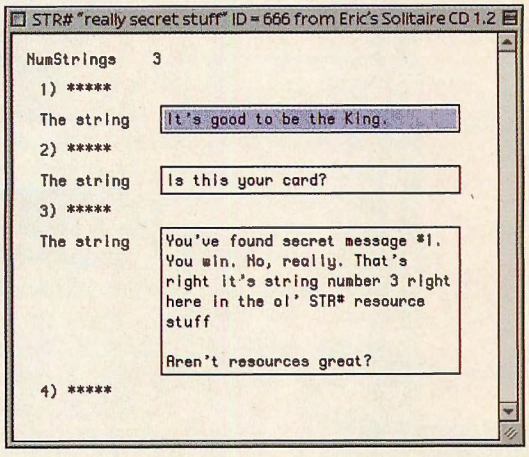
The Poem

Location: Ambrosia Software's Escape Velocity
Crack the shell: Open the game using ResEdit, then double-click on the STR resource and choose STR#ID=3D20002.
The egg: If you read the strings line by line, they make a poem that goes like this:

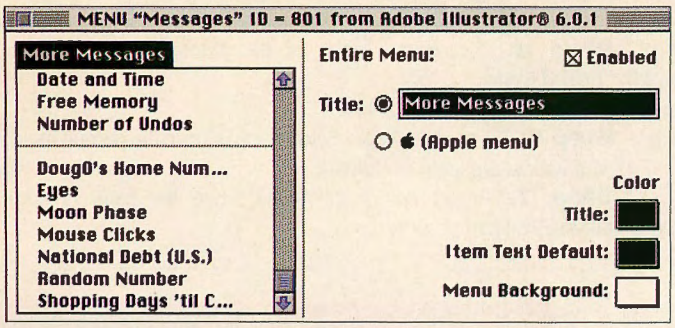
In the not-too-distant future
Last April A.D.
There was a guy named Matt
Who came up with the game EV
He worked for Ambrosia Software, Inc.
Run by a guy named Andrew, I think
They thought the new game was at its best
So they got a bunch of users and
 they put it to the test
We'll send him lots of suggestions
The most that can possible be (la-la-la)
He'll have to sit and code them all
And keep his GPA above three (la-la-la)
Now keep in mind Matt can't control
When the beta time will end (la-la-la)
He'll have to implement his code
With help from his Ambrosia friends
Ambrosia Roll Call!
Cajun! ("I'm the list god!")
Andrew! ("Compatibility, dammit!")
Hector! ("Hello")
Gayle! ("Men are all pigs!")
You're wondering how he eats
 and sleeps
With things that way (la-la-la)
I should really shut up and play!
...with Escape Velocity Theatre
...1.0
-MCB 4:35 A.M.
(with apologies to MST3K)



The Message



Location: Delta Tao Software's Eric's Solitaire CD 1.2
Crack the shell: Open the game in ResEdit and open the String resource, where you'll then double-click on STR# "really secret stuff" ID=666.
The egg: You get the message box above.



The Pop-up Menu

Location: Adobe Illustrator 6.0.1

Crack the shell: Hold down the Option key and click on the Selection menu in the lower left corner of the window.

The egg: You get a strange pop-up menu, which offers options that will let you see the following items in the Selection bar: Doug O's home phone number, a pair of wandering eyeballs, the phases of the moon, a mouse click tally, the rising national debt, random numbers, and a count-down of the shopping days until Christmas. Not only strange but also useful.

Hunting for Easter Eggs

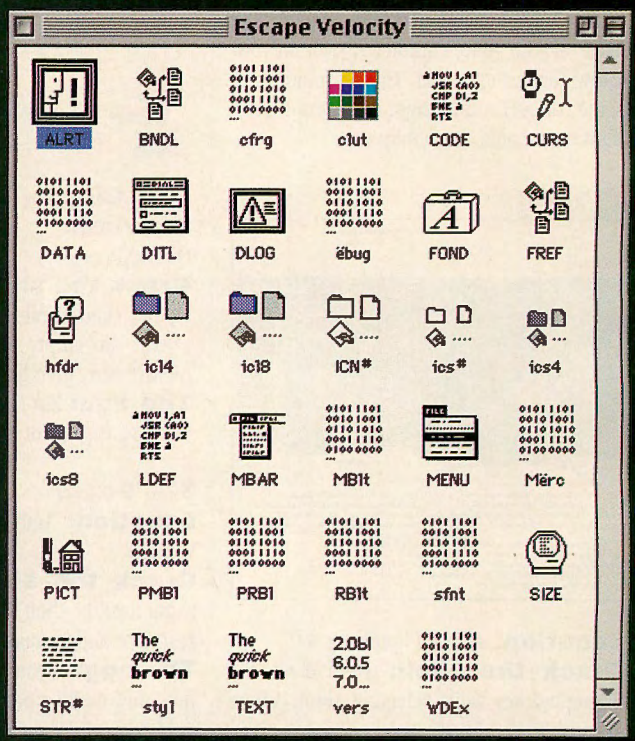
Maybe you never could attend the annual White House Easter egg hunt, what with that FBI record and all—my, how those things can haunt even an 8-year-old kid. But this is not a problem, because armed with a few tips and Apple's ResEdit, you can start hunting for pigmented eggs of the digital variety.

First the easy stuff. If you're looking for Easter eggs in various applications, try holding down various modifier keys while making selections from the menus or from toolbars. A favorite is to hold down the Option key and select About This Application... from the Apple menu. For example, when you do this in the Finder, instead of About This Computer..., you get an About The Finder... menu choice, which shows some mountains and the names of the folks who had something to do with creating the Finder.

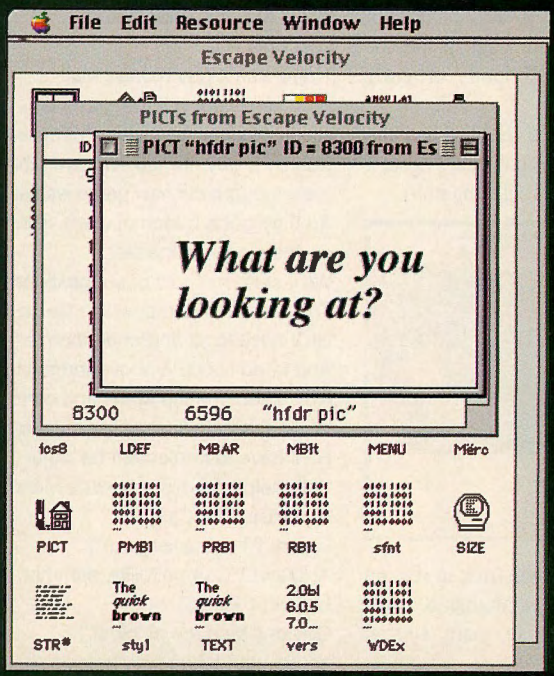
Playing around with mouse clicks and modifier keys isn't the most exciting, or productive, way to hunt for eggs. You'll do far better using ResEdit to spelunk inside the resources of various applications. Here are some guiding principles for you in your quest for these hidden treasures:

* Always make a copy of the application (or Control Panel or other item you'll be tearing up) before you open it with ResEdit. Even if you don't save changes, ResEdit is not forgiving if you crash while an application's resources are open.
* Check the PICT, snd, and STR# resources as likely hiding spots. Open the application from inside ResEdit, select one of these resource types from the window that opens, and then open some of the individual resources. Look for suspicious names or the suspicious lack of names.
* Choose applications likely to have Easter eggs. BareBones Software's BBEdit is more likely to have an Easter egg than Microsoft Excel (although you never know).
* Use ResEdit to browse your hard drive for invisible files. For example, on LucasArts Entertainment's TIE Fighter, there's an invisible Secret Read Me file that has a hint about a secret door in the game.

Finally, the disclaimer: We are not responsible for any damage you may do while mucking about with ResEdit. This is a powerful tool, and it should be used with caution (or at least not reckless abandon). —*David Reynolds*



WHEN YOU FIRST OPEN Escape Velocity with ResEdit, you're confronted with this window of resource types. Just double-click one to open it.



BY BROWSING through the PICT resources, we uncovered this little gem. Browse through the STR# and snd resources for some additional giggles.

Crack the Code Name Find-a-Word Wimp Detector

Hush-hush Microsoft dealings and tight-lipped CEO searches aside, Apple usually can't keep a secret longer than it takes a well-connected snitch to call up email. To give the company credit, it hasn't given up on the code name game. To keep development projects under wraps, Apple assigns each project an internal and an external code name. The external name almost always leaks immediately (who didn't call Mac OS 8 Tempo?), but the internal name occasionally remains classified.

To be on the safe side, Apple never names projects after living people, dead people whose estates might sue, or anything with a trademark, unless it gets permission. Several years ago, the company got mixed up in a nasty lawsuit with the famous scientist Carl Sagan, who didn't appreciate his name being used as a code name for the Power Mac 7100, especially since the other Power Macs in the series were named PiltDown Man and Cold Fusion, two scientific hoaxes. So the ticked-off engineers at Apple changed the code name to BHA, for Butt-Head Astronomer, prompting yet another lawsuit. Forced to change the name again, engineers finally settled on LAW (Lawyers Are Wimps).

Lawyers aren't the only wimps, so we created this wimp-detecting word-search puzzle. Are you close enough to the Apple inner circle that you could wax Steve Jobs' legs without getting caught? Or are you so clueless to the Cupertino trivia that you're right now wondering, "What the heck is a Cupertino?" We'll weed the wimps from the weirdos (come on, if you know this much about code names, you have to be a little odd) by making you figure out the code name before you can look for it in the puzzle. Yeah, we give clues. We even throw in easy ones. For the very faint of heart, we'll publish the answers next month.

V	T	L	M	A	C	L	M	S	P	A	R	T	A	C	U	S	T	G
S	P	E	A	K	T	C	B	F	R	T	S	K	G	H	V	C	T	R
E	T	F	M	O	Z	A	R	T	F	Q	T	H	I	A	L	R	Q	E
Q	P	R	A	D	A	R	B	N	O	D	R	D	L	B	M	X	Y	E
O	L	A	L	B	R	L	I	M	A	M	K	A	S	L	P	N	O	N
D	P	N	N	C	H	S	C	O	L	D	F	U	S	I	O	N	C	T
L	A	K	B	T	C	A	H	L	A	W	T	V	C	S	C	H	C	X
M	T	L	R	L	K	G	L	G	W	M	O	Y	A	V	A	L	I	N
K	G	E	I	E	M	A	C	A	D	D	I	C	T	C	P	H	P	O
A	L	A	D	D	I	N	P	Q	F	C	T	A	I	T	P	V	T	M
N	V	C	E	T	J	O	N	K	P	L	P	D	M	M	L	N	H	N
G	T	R	O	I	R	H	M	V	R	B	R	A	S	H	E	C	A	Y
A	G	L	F	G	S	P	I	K	E	Q	L	D	P	V	C	L	T	W
T	R	J	B	V	O	C	W	Z	G	L	V	T	E	A	L	L	O	A
G	T	U	U	O	L	A	T	X	O	V	I	N	A	N	I	A	B	L
C	M	D	S	L	B	T	K	M	L	T	O	A	K	M	P	L	V	L
M	V	Y	T	M	G	A	W	V	J	E	X	V	Y	Z	S	L	C	S
B	L	U	E	L	K	L	Y	A	M	M	A	C	F	X	E	E	H	T
Q	S	A	R	A	V	Y	O	W	A	P	V	C	T	W	L	W	T	R
W	A	R	H	O	L	S	H	N	S	O	T	A	H	M	T	X	M	E
G	R	U	M	P	S	T	S	U	N	A	M	I	V	U	L	A	C	E
V	T	L	C	O	P	L	A	N	D	N	A	E	B	O	C	M	Q	T

Code name clues:

1. We've mentioned this guy already.
2. We've also mentioned his nickname.
3. The Power Mac 7100's last name was ___
4. The Power Mac 8100 was also a hoax.
5. See the 20th Anniversary Mac.
6. This long-awaited operating system died before it could live.
7. The Power Mac 6100 was not a PDA, it was the PD_.
8. Even before OS 8 was great, it was ___
9. You don't have to be a Smart spy to know that OS 8's internal code name wasn't Agent 86.
10. Apple will make a lot of money on ___ with this yet-to-be announced PowerBook.
11. They were QuickDraw GX fonts, not spaghetti sauce!
12. The 9500 made some big waves; in fact, they were the biggest.
13. The Power Mac 7200 was more of a ___ for change.
14. OS 8.0.1 is bashful as a bride, and buster, you'd better believe it.
15. The Duo was actually code-named after a *Star Trek* episode, titled "Best of Both Worlds."
16. The Mac SE had two nicknames, and they're both in the puzzle.
17. The code name for this upcoming PowerBook could have played with Pooh.
18. The internal code name for QuickTime 1.0 was named after a pop artist who painted pop icons and created icons of pop. Heavy.
19. System 7.5 was code-named after Wolfgang ___, not Puck. Duh.
20. The code name for the PowerBook 140/170 rhymes with whim.

Technology Trivia Trap

Secret ***n.*** **1** Something kept hidden from others or known only to oneself or to a few. **2** Something that remains beyond understanding or explanation; mystery.

Easter eggs, private testing labs, and code names all are secrets that have been kept from you (until now) by close-lipped Apple managers fearing internal retribution. But what about the secrets they aren't keeping from you? Do you know the difference between OpenDoc, Open Transport, and OpenStep? Or does the mere question leave you open-mouthed, lost in a hazy confusion of innercaps and technobabble?

Replace the mystery with meaning while you test your knowledge of Mac technology in the following seven-question quiz. Pick the answers you think are correct and then check the explanation to see where you went right or wrong. In the spirit of preserving what shreds of self-esteem you may have left at the end of the quiz, we won't be judging your Mac expertise. So don't worry about your grade, just have fun.

Tech Test 101

1. Which acronym is the odd one out?

a) JPEG
b) TIFF
c) EPS
d) PICT

All are graphics file formats. JPEG, which stands for Joint Photographic Experts Group, is the one most often used when creating Web graphics. TIFF, or Tagged Image File Format, is the most common for saving pixel-based images. EPS, Encapsulated PostScript, files are used for storing high-res PostScript images. PICT files, which are written in the Mac's native QuickDraw language, can hold pixel- or vector-based graphics but are rarely used for anything that requires printing.

PICT isn't an acronym but is short for *picture*, making it the odd one out. You could also say that JPEG is the only *lossy* file format (you lose some data in compression, which means your image won't look as good after it's saved), making JPEG the one that doesn't belong. Then again, you could say EPS and PICT are the odd ones out because they're the only formats with a vector-based component. So, heck, pick whatever answer you want.

2. Which technology is the odd one out?

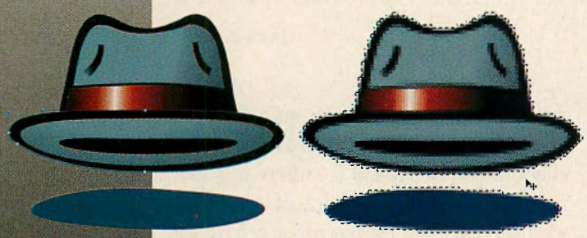
a) PlainTalk
b) AppleTalk
c) LocalTalk
d) PowerTalk

PlainTalk lets your Mac talk to you and even lets you speak to your Mac through speech recognition technology. AppleTalk is a series of network protocols wired into every Mac, which your Mac uses to have long, meaningful conversations with other devices on a network. LocalTalk is the networking hardware that your Mac uses to hook up with those devices on a network. And PowerTalk used to let you send email, faxes, files, and digital business cards over a network.

So which is the odd one out? Although PlainTalk is the only technology that has nothing to do with networks, PowerTalk is the only one listed above that Apple killed dead like a pesky roach. Sure, PlainTalk is being left to slowly rot like a half-eaten prairie dog in the desert sun, but it still has a breath or two left in it, making PowerTalk the odd one out.

3. Which program is the odd one out?

a) MetaCreations Painter
b) Adobe Photoshop
c) Adobe Illustrator

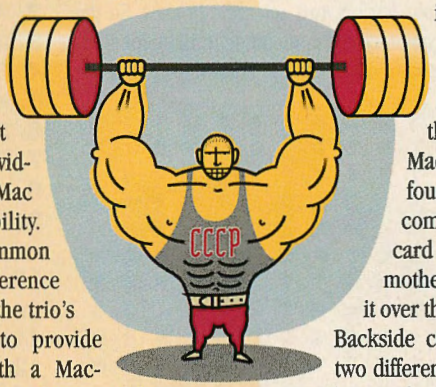


If you guessed Painter, because it's not an Adobe product, guess again. Painter and Photoshop are pixel-based graphics programs; Illustrator is vector based. What's the difference? Vector-based images are created using complex mathematical equations, whereas pixel-based images (also called *raster* images) are made up of little dots (pixels) arranged on a grid. Vector-based graphics are easier to manipulate and are resolution independent, which means they reproduce onscreen or in print at the highest resolution your monitor or printer produces. Most drawing programs are vector based.

4. Pick the acronym that's not also a synonym for the following acronyms. (Then say that sentence 10 times fast.)

a) PREP
b) CHRP
c) PPCP
d) CCCP

PREP, or PowerPC Reference Platform, was the first attempt by Apple, IBM, and Motorola to create an open-architecture CPU that could run several different operating systems including the Mac OS. PREP, however, was ditched after Apple decided that it wasn't capable of providing complete Mac OS compatibility. CHRP, or Common Hardware Reference Platform, was the trio's next attempt to provide developers with a Mac-compatible that they could make without having to license Apple's motherboard designs. PPCP, or PowerPC Platform, was Apple's attempt to rename CHRP (pronounced "chirp"), but it never caught on because it wasn't as much fun to say. CCCP is the former Russian acronym for the Soviet Union, which, like PREP, has since been disenvoweled.



5. FireWire is:

a) An ultramodern, 3D method of browsing the Web.
b) A new digital interface for connecting peripherals to your Mac.
c) An email program that lets supervisors terminate their employees without ever having to meet with them face-to-face.

Apple calls FireWire the latest, greatest method of hooking up peripherals to the Mac, claiming it eventually will replace SCSI entirely and become the new industry standard. Currently, few third-party developers have moved to FireWire, even though it's nonproprietary, hot-pluggable, and digital, which in theory should make it an easier, cleaner method for importing and exporting digital video and sounds to the Macintosh. HotSauce, formerly known as ProjectX, was Apple's flashy 3D way of browsing the Web, which the company used to be really excited about until the guy in charge of it moved to Netscape, which used to be really excited about it. Now no one's really excited about it. The email program Steve Jobs uses to can employees does not yet have a name.

6. Which cache is the odd one out?

a) Level 1 cache
b) Level 2 cache
c) Level 4 cache
d) Backside cache
e) Inline cache

A memory cache speeds up your Mac's performance by storing frequently used information outside the normal RAM in superfast memory. Level 1 (L1, for short) cache is built into the processor of Power Macs. Level 2 cache, which is found in most Power Macs, comes in the form of an external card that fits into a slot on the motherboard. Data has to travel to it over the relatively slow system bus. Backside cache and inline cache are two different methods of routing the L2 cache over faster buses, thereby giving your Mac an overall speed boost. Level 4 cache does not exist.

7. What does DNS stand for, and how do you get access to one?

a) It's short for Devious NeXT Sale, and you must be a devious former Apple co-founder to reap the benefits.
b) It means Donuts Not Stale, and it's illegal to display in convenience stores.
c) It's short for Domain Name Server, and you access it through your ISP.

Although each answer holds some merit, the most accurate response would be the last. Each computer that ventures onto the Net must make itself known with a numeric address (usually a very long one) that most people would find hard to remember. So, we give ourselves addresses made of names, not numbers. Domain Name Servers reside with your local Internet service provider (ISP) and act as translators, turning these names into numbers so that your computer can greet other machines in cyberspace.

Associate Editor Nikki Echler thanks the Apple employees, friends, readers, colleagues, boyfriend, and bosses who helped in the making of this article. No actual names will be mentioned in order to protect the not-so-innocent, except for the notorious Daniel Fanton, who knows more about Easter eggs than the big bunny himself.

REAL 8 POOL™

There's nothing virtual about it.

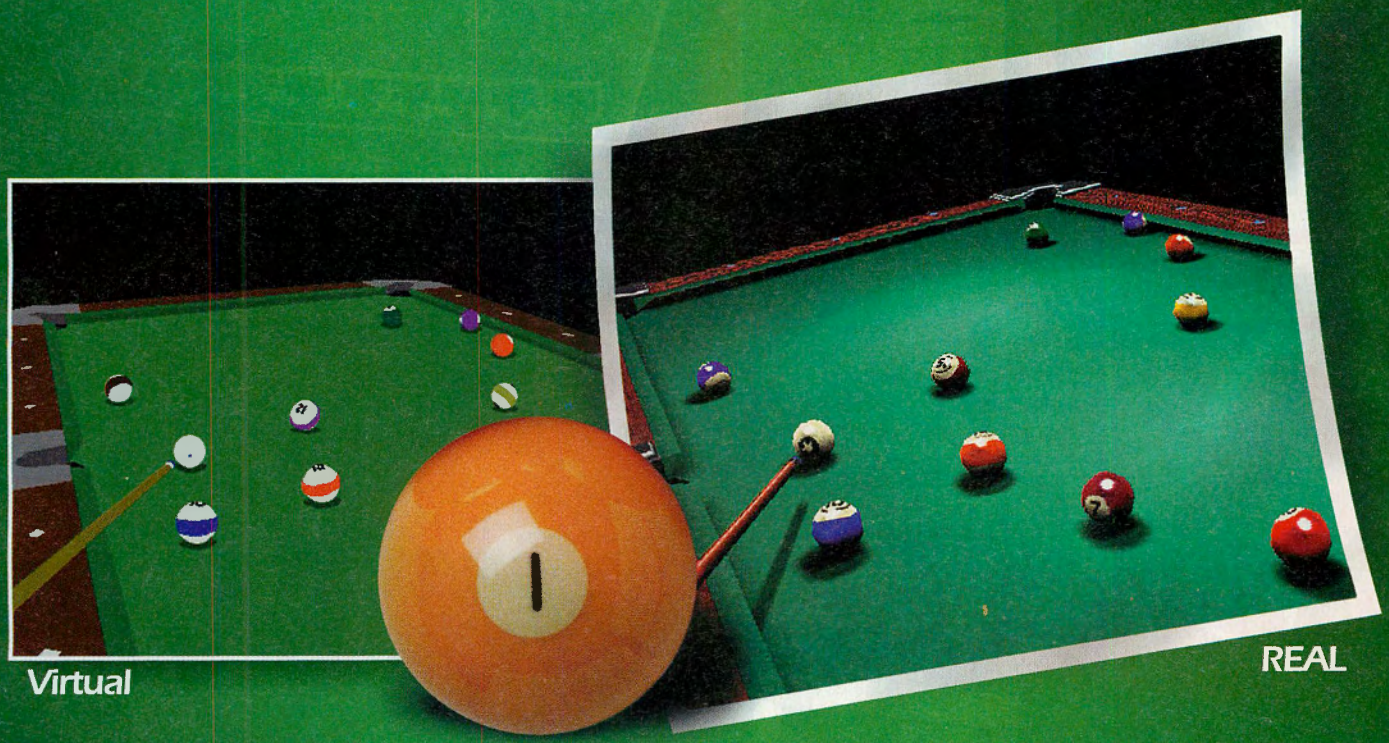
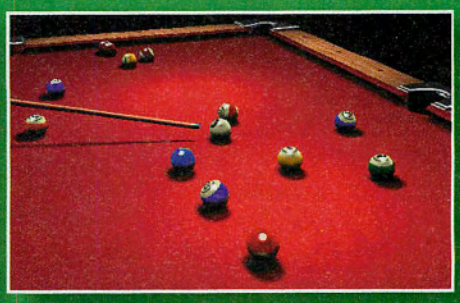


Photo-Realistic 3D in Real Time



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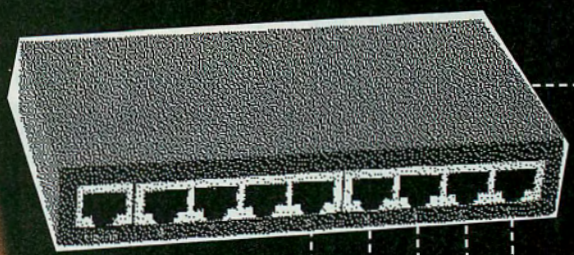
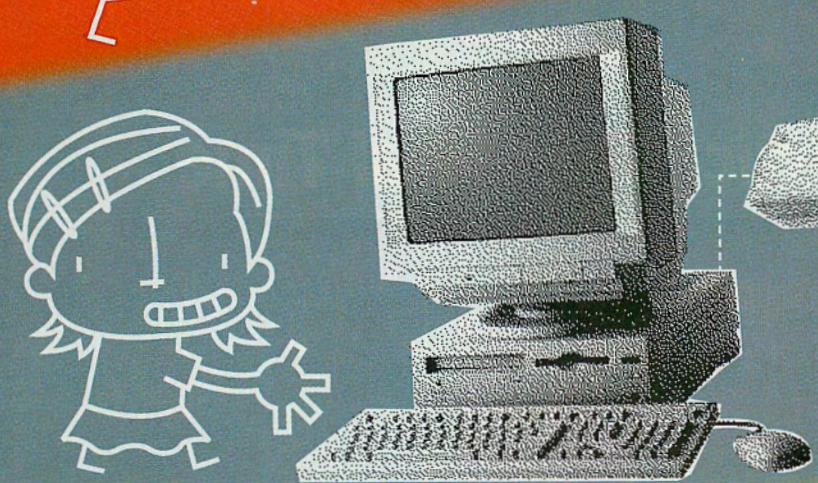
Hook Up Your Macs

network

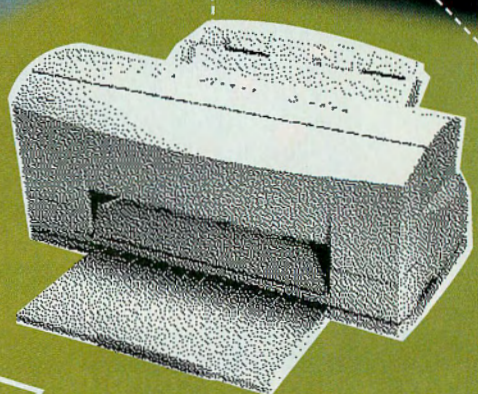
NEWER MACS CONNECT to an Ethernet network via a built-in 10baseT Ethernet port.

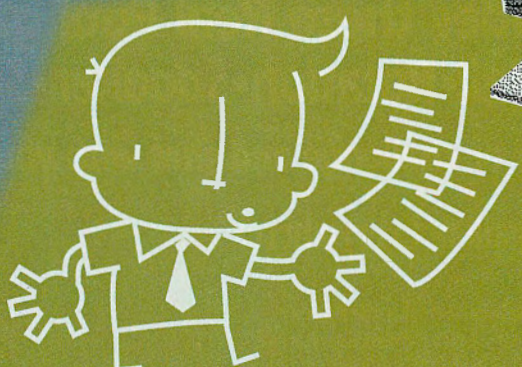


ALL CABLES LEAD TO THE HUB. After all, it's the center of your network



OLDER MACS have an AAUI-15 Ethernet port.



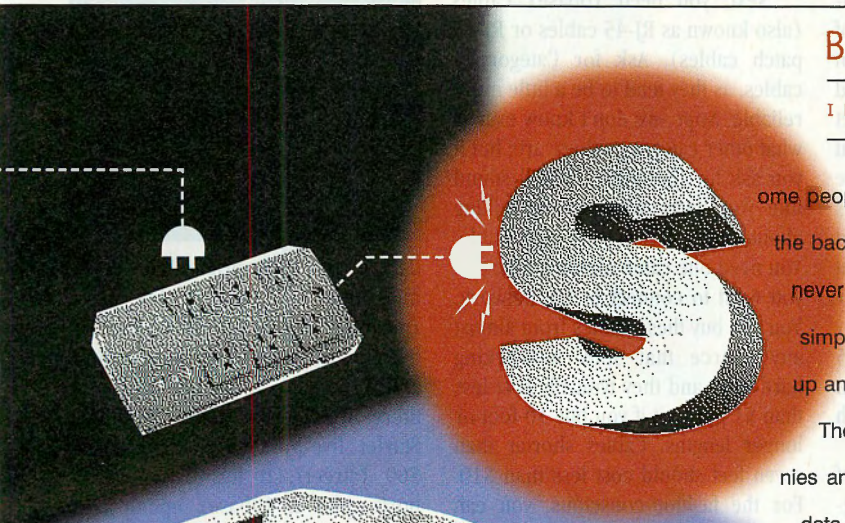


PRINTERS WITHOUT ETHERNET can still connect to your Ethernet network with an Ethernet-to-LocalTalk bridge.

WITH SUPERFAST ETHERNET

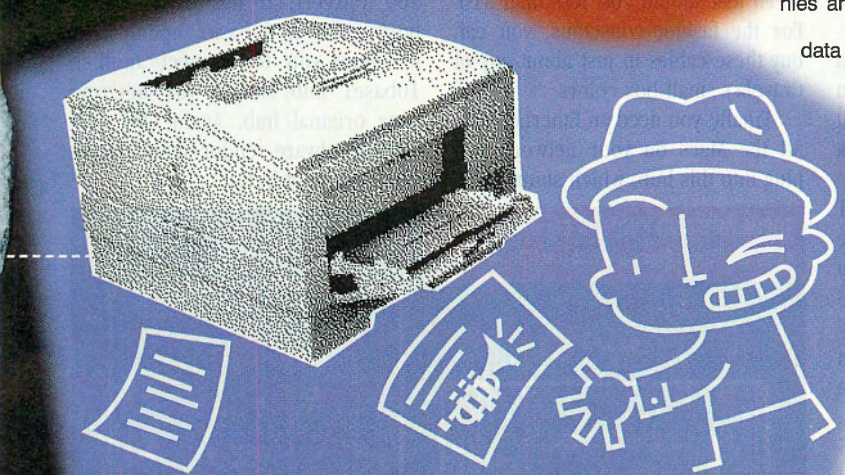
BY DAVID REYNOLDS

ILLUSTRATIONS BY ADAM VANDERHOOF



Some people do it because they want to shoot their best friend in the back with a combat shotgun. Some do it because they can never get enough speed. And some, like Sir Edmund Hillary, simply do it because it's there. We're talking about hooking up an Ethernet network.

There was a time when Ethernet was just for corporate weenies and science geeks who needed to pass huge amounts of data quickly between computers. The rest of us didn't need to do that. Our Macs had built-in LocalTalk, and all it took to get two Macs talking was a couple of LocalTalk boxes and some cable. Well, times have changed. Although all Macs still ship with LocalTalk, files now are measured in megabytes instead of kilobytes, and that 230Kbps maximum LocalTalk speed seems so incredibly slow, especially when you look at that unused 10Mbps Ethernet port on the back of your Mac.

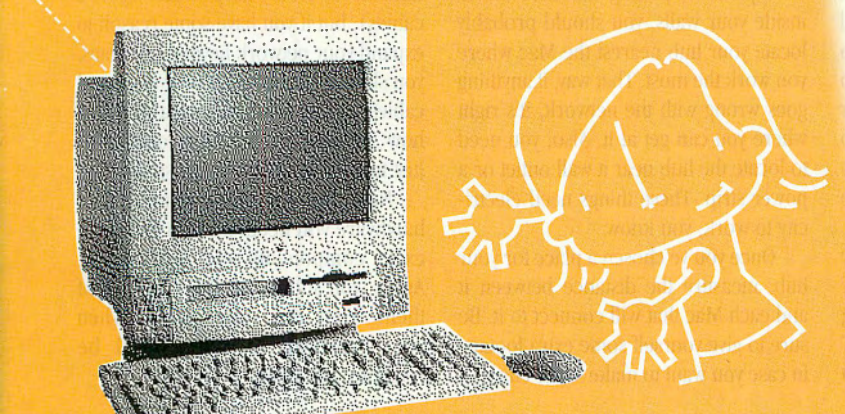


PRINTERS WITH ONBOARD ETHERNET can plug right in.

If you have a couple of Macs with Ethernet, you can take advantage of that Ethernet port for a lower cost than you might think. All you need are some cables, an Ethernet hub, and possibly a couple of Ethernet transceivers. Follow along, and soon you'll have your Macs flinging data back and forth with amazing speed.

We'll show you how to build a 10baseT Ethernet network in your very own home. We chose the 10baseT because it tends to be cheaper for larger networks, and it's easier to troubleshoot if something goes wrong. You may have heard of a 10base2 Ethernet network (also called thinnet), but these are soon likely to be a thing of the past, because Apple and the clone vendors are standardizing on the 10baseT port, and also because 10base2 networks are more difficult to troubleshoot and can be more expensive in the long run.

MACS WITHOUT ONBOARD ETHERNET can still be connected using a PDS card.



NEED FOR SPEED

The average Mac Ethernet network can transfer data at up to 10Mbps, whereas the old-fashioned LocalTalk connection is limited to 230.4Kbps. That's why everyone wants Ethernet.

WHAT YOU NEED

* Two or more Macs that you want to connect
* Ethernet cards for each Mac without onboard Ethernet (or external Ethernet boxes for Macs without expansion slots)
* One transceiver for each Mac with an AAUI-15 Ethernet port
* An Ethernet hub
* 10baseT cables

ADDING UP THE BUCKS

Want to know how much your network will cost? Connecting two Macs via Ethernet is around $90 (depending on which hub you buy) but can be done as cheaply as $70. Here's how to calculate the cost of your network. Start at $90, then:

* Add $10 for each additional Mac on the network (covers the cost of cables)
* Add $80 for each Mac without onboard Ethernet (for Ethernet expansion cards)
* Add $35 for each Mac with an AAUI-15 Ethernet port (covers the cost of transceivers)

STEP 1:
GATHER THE HARDWARE

First, figure out what kind of hardware you need. Look at the back of each Mac that you want to include on the network, and figure out what kind of Ethernet port it has. The Ethernet port is the one with the symbol that looks like this above it: ⟪ooo⟫ There are two kinds of Ethernet ports used on Macintoshes: AAUI-15 and 10baseT. If the port looks like a fat telephone jack, it's a 10baseT Ethernet port. If it looks like a tiny Centronics SCSI port, it's an AAUI-15 Ethernet port—usually found on older Macs. Some Macs have both 10baseT and AAUI-15 ports.

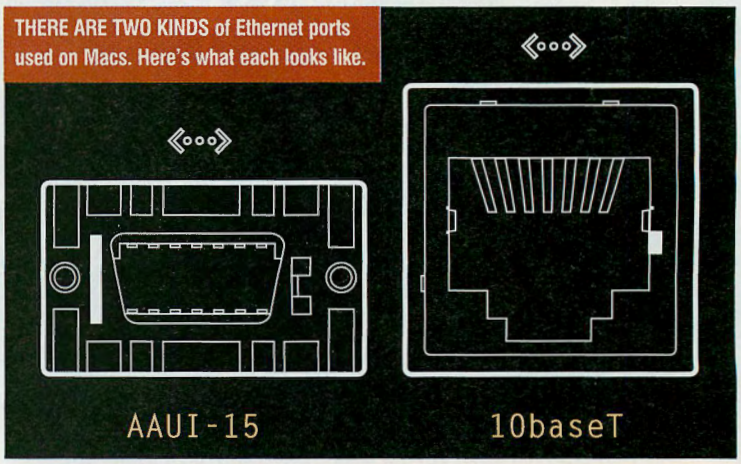
Now that you know what kind of ports your Macs have, you must figure out how to get them connected to the Ethernet hub (more details on this later). The objective is to get all of your Macs connected with a 10baseT cable to the hub. That's no problem if your Mac has a 10baseT port—simply plug the cable into the port, and you're ready to connect to the hub. But if your Mac has an AAUI-15 port, you'll have to buy a transceiver. This little box is basically an adapter that allows you to connect a 10baseT cable to an AAUI-15 port. Tranceivers cost less than $35 and can be had from several companies: Asanté Technology (800-662-9686, http://www.asante.com) makes the FriendlyNet adapter; Dayna Communications (801-269-7200, http://www.dayna.com) makes the EasyNet transceiver; and Farallon Communications (510-814-5000, http://www.farallon.com) makes the EtherMac transceiver. These models are all roughly equivalent.

Next, you need 10baseT cables (also known as RJ-45 cables or RJ-45 patch cables). Ask for Category 5 cables, as they tend to be a little more reliable. Nope, we don't know exactly what other categories there are, but if you ask for Category 5, you'll sound like you know what you're talking about, and you'll get the right cable. You need one cable for each Mac that you want to connect to the network. You can buy these cables from almost any source that sells networking hardware, and they typically cost less than $1 per foot if you buy 10-foot or longer lengths. Cables shorter than seven feet should cost less than $10. For the fashion-conscious, you can buy these cables in just about any of Crayola's small-box colors.

Finally, you need an Ethernet hub. All the Macs on your network will plug into this hub, which shuttles the data to the appropriate Mac. Small hubs that have four or five ports (meaning you can connect four or five Macs together) cost between $50 and $100, and there are many out there. We like Farallon's Streamline Starlet five-port hub, which costs $69 (street). It has five 10baseT ports, plus a 10baseT uplink port to allow you to connect another 10baseT hub should you outgrow your original hub. Again, any network hardware vendor should carry small Ethernet hubs.

HOT TIP: What if your Mac doesn't have an Ethernet port? You can purchase either an add-in card that offers an Ethernet connection or an external box that hooks to your Mac's serial port and offers an Ethernet connection. Vendors such as Asanté Technology, Dayna Communications, and Farallon Communications make these cards and boxes.

THERE ARE TWO KINDS of Ethernet ports used on Macs. Here's what each looks like.



STEP 2:
PLAN YOUR NETWORK

Before you go stringing a bunch of cables around your house, you should have some idea of what you want to connect and where you want things to be. You probably already have your Macs set up, and there's no reason to relocate them, so the only new things you must add to your home are some cables and an Ethernet hub.

Because each Mac hooks directly into the Ethernet hub via its 10baseT cable (rather than all of them stringing together daisy-chain style), a 10baseT network looks more like a spider web than a line. Keep this in mind as you pick a spot for your Ethernet hub, because wherever it ends up, several cables will be running to it. Unless you have plans of putting Ethernet cables inside your walls, you should probably locate your hub nearest the Mac where you work the most. That way, if anything goes wrong with the network, it's right where you can get at it. Also, you need to locate the hub near a wall outlet or a power strip. These things need electricity to work, you know.

Once you've chosen a place for your hub, measure the distance between it and each Mac that will connect to it. Be sure to give yourself some extra footage in case you want to make some changes to your setup. These measurements are the lengths of the 10baseT cables that you'll buy. You probably don't need to make a network diagram (after all, how difficult is it to keep track of five cables), but if you have some reason to expand your network beyond five Macs, you should start labeling your ports and cables, and you should keep a sketch of how the network connects together—just to help you keep things straight.

Now that you know what kind of hardware you need, make a list of the exact components and order them. Again, you should be able to get all of them from the same place. When your hardware arrives, you'll be ready to get wired.

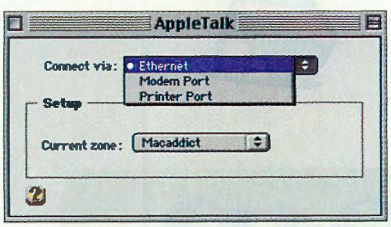
STEP 3: CONNECT IT ALL

Ah, the FedEx driver arrived with your parcel, and you're ready to start stringing cable. After cleaning up the foam packing material, put the hub in its place, but don't plug it in yet. Make sure that all your Macs are turned off, and plug a transceiver (if necessary) into any Mac with an AAUI-15 port. Choose a cable and match it with the Mac for which it was measured. Plug one end of the cable into the Mac's 10baseT port, and plug the other end into an empty port on the Ethernet hub. Repeat this for each Mac on the network. Don't plug the cables into the uplink port; remember, this is for connecting hubs together. Finally, plug the hub into the wall outlet.

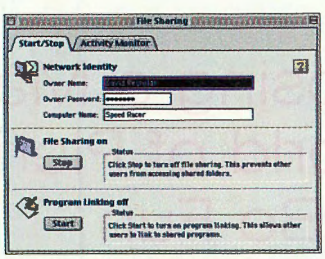
Power up your Macs, and you're ready to roll.

STEP 4: SET UP THE SOFTWARE

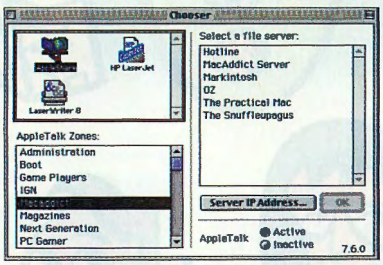
Now for the easy part—configuring your Mac's networking software. We recommend using Apple's Open Transport 1.1.2 or later. The latest version of Open Transport is on The Disc. You'll need to repeat the following steps for each Mac on your network. Go to the AppleTalk Control Panel :



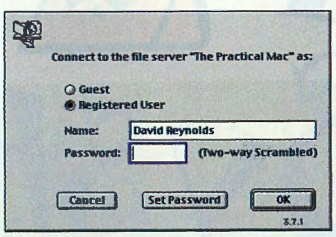
Select Ethernet from the pop-up menu. Don't worry about setting a zone in the menu below the Connect via: section unless you plan on building a really large network. Then, open the File Sharing control panel and give each Mac an Owner Name, an Owner Password, and a Macintosh Name: (Mac OS 7.x users do this in the Sharing Setup control panel.)

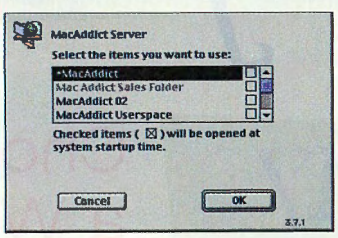


Now, for testing. After you set up all your Macs, open the Chooser and click on the AppleShare icon (see above):



All your newly networked Macs should show up in the window to the right of the AppleShare icon. To connect to one, first double-click on its name and fill in the relevant information in the dialog box:





Then select its hard drive name, and click OK (see above):

You should be networked. Note: Don't check the box to the right of the drive's name unless you want to connect to that Mac each time you start up. This can get annoying quickly.

Test your new network by connecting to each Mac from each Mac. That way, you'll make sure that everything is kosher.

HOT TIP: Match the network software versions on all your Macs. We recommend Apple's Open Transport 1.1.2 or later.

STEP 5: CLEAN UP AFTER YOURSELF

So your network works, but you have cables winding all over the living room and bedroom. Now that you know that everything is OK, you can hide your cables. Using extra-wide staples, you can secure your cables to the small corner where baseboards and moulding meet the wall, or you can just run them along the corner where the wall meets the floor. Don't put them under carpets or throw rugs. Friction can wear the cable's insulation off, causing an unexplained network failure months or years down the road.

HOT TIP: Make sure you don't crimp or tightly wrap or wind network cables. Performance will suffer.

David Reynolds is disappointed to discover that Barney is really some guy in a purple dinosaur costume.

HOOKING UP A PRINTER

If you have a printer with onboard Ethernet, you can connect it to your network with the techniques described here. Although this won't improve the speed at which the printer actually prints the image, it will improve the speed at which the printer gets the data, making the whole operation run a little faster. If your printer doesn't have onboard Ethernet, you still can plug it into the network, via a LocalTalk-to-Ethernet bridge. This little box runs around $200 and hooks up any LocalTalk printer to your Ethernet network. (Note that a bridge also lets you hook up a LocalTalk-only Mac to your Ethernet network.) The microPrint/2 (MacWarehouse part number DMA 1145) from Sonic System (888-222-6563, http://www.sonicsys.com) is an example of a bridge; it can connect two LocalTalk devices to your Ethernet network. The downside to using a bridge is that you still get only LocalTalk speeds.

REALLY CHEAP ETHERNET

If you want to set up a cheap Ethernet connection between two Macs, you can do it for less than $15. The downside? You are limited to connecting two Macs. You'll need to buy a crossover 10baseT cable (which looks like a normal 10baseT cable except that its send/receive pairs are crossed). To set up a crossover Ethernet connection, all you have to do is connect the two Macs with the crossover Ethernet cable and set up the networking software. You'll still need transceivers for any Macs with AAUI-15 ports. There are a couple of other things to be aware of when using a crossover cable: First, you may get some unexplained crashes; and second, the AppleTalk control panel won't always hold its Ethernet setting. However, this is a cheap way to get a fast connection between two Macs. Data Comm Warehouse (800-328.2261, http://www.warehouse.com/DataComm) offers a 12-foot Category 5 crossover for $12.95 (part number DCA1409).

System, System, Who's Got My System?

Choosing a Mac in a World of Plenty Can Be Fun

By D. D. Turner

Illustrations by Tim Carroll

Everybody has to believe in something. The ancient Greeks believed there were only four elements. The Plains Indians believe the coyote is a trickster. Economists believe that competition drives down prices and fosters innovation. (Well, they also believe full employment is bad, but with this innovation and pricing thing, they may have a point.) At no time before on this planet has there been such a selection of Macs. The positive is that you have more choices than ever, and it's pretty much assured that whatever you buy, you'll get a good machine (it is a Mac, after all). The negative is that with Apple's buyout of Power Computing's Mac OS business and the lack of Mac OS licensing agreements, buying a Mac clone isn't the sure thing that it used to be. Even so, we think that the Mac compatibles that are out there are still worth considering. Power Computing will still be selling its Mac compatibles through December, 1997, and Apple will take over service and support for Power Computing machines sold until then. Although the selection process can get a wee bit confusing, *MacAddict* will cut through the overwhelming variety and will help point you toward your dream Mac-hine. We created a composite profile of four types of Macintosh users and determined which particular Macs best serve which type. Follow our case studies to determine which profile most closely fits you and see which Macs fit that profile. Find where you fit in, and many of your Mac selection questions will be resolved—or at least you'll know what questions to ask.

Grace the Gamer

Known to her net-gamer-mates as "Amazing Grace," Grace lives for the thrill of victory and the agony of her friends' defeat. She wants the fastest processors, of course, but primarily to push all the pixels and polygons in the latest shoot-'em-up, so she realizes that being on the cutting edge of chip design isn't as much a necessity for her as a midrange processor mated to a good (and upgradable) graphics card. She needs her hard drive mainly to hold game applications—the glorious saved games and screenshots of fallen comrades (fallen, it should be said, mostly by her hand) can be stored on removable media. She does want a fast CD-ROM drive, however, to reduce game load times. Of course, 3D acceleration is a must, and the Mac should be easy to maintain and upgrade, because any time spent away from the World o' Gaming is torture for Grace.

The Profile

AGE: 23
RESIDENCE: Apartment (shared with two roommates)
HEIGHT: 5' 9"
WEIGHT: 140 lbs.
FAVORITE MOVIE: *Aliens*
LEAST FAVORITE MOVIE: *Terms of Endearment*
MEMORABLE QUOTE: "You think that's a rocket launcher? That's not a rocket launcher. Now this is a rocket launcher."

NEEDS: Moderate processor, 3D acceleration, easy upgradability, moderate price **WANTS:** Fast processor, removable media **DOESN'T CARE:** Software bundle (unless it consists of new games), fast hard drive

The Choices

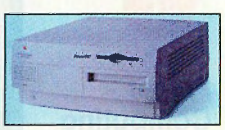
1 Apple Power Mac 6500/250

A 250MHz 603e processor, 32MB of RAM, a 4GB hard drive, 256K of Level 2 cache, a built-in Zip drive, a 12X CD-ROM drive, and onboard 3D acceleration should be enough to warm any gamer's heart. The bundle of special 3D-accelerated games such as Mechwarrior II, Weekend Warrior, and Actua Soccer should help, and the sub-$2,000 price leaves pocket change to spend on more games. It also has two 7-inch PCI slots available, in case a newer 3D card comes along.

2 Power Computing PowerBase 240LP

At less than $1,600, the low-profile version of this machine still offers three PCI slots, a 240MHz 603e processor, 3D acceleration, and a productivity software bundle. However, the 2GB hard drive could fill up, and the serious gamer will want more than the included 16MB of RAM.

3 Apple Power Mac 7300/180



There's no doubt that a 604e chip handles 3D better than a 603e, and although the 7300 doesn't come with built-in 3D acceleration, the combination of a low-cost PCI card such as TechWorks' 3Dfx card, this machine would really rock. That plus the RAM upgrade from the included 16MB would drive the around-$2,000 price up to the mid-$2,000s, but hey, are you serious or not? Well, are you?

BYTES ARE YOUR FOOD, THESE ARE THE PROCESSORS

601 The first PowerPC chip to ship in Power Macintoshes
- **Cache:** Unified 32K Level 1 cache (both instructions and data)
- **Speed:** About as fast as a Pentium at the same megahertz
- **What it's good for:** Desktop Macs
- **Size:** 3 million transistors spaced at 0.6 microns
- **No longer used**

603 A low-power second-generation PowerPC chip; eventually given more cache and a letter to become the 603e
- **Cache:** Separate data and instruction caches at 8K each (The 603e has 16K caches.)
- **Speed:** About as fast as a 601 or a Pentium at the same megahertz
- **What it's good for:** Great for PowerBooks, good for desktop Macs
- **Still being used**

604 A high-power second-generation PowerPC chip; eventually given more cache and a letter to become the 604e
- **Cache:** Separate data and instruction caches at 16K each (The 604e has 32K caches.)
- **Speed:** Thirty percent faster than a 603 or a Pentium at the same megahertz
- **What it's good for:** Desktop Macs
- **Size:** 5.1 million transistors spaced at 0.25 to 0.5 microns
- **Still being used**

Harry the Homebody

Harry runs a household and all that entails. He uses his Mac to help educate and entertain his kids (Marathon keeps them out of his hair), balance the checkbook, check parenting resources on the Internet, and keep his sanity through email and the parents.dont.kill.your.kids newsgroup. His needs have to be balanced with those of the children, so he runs At Ease to lock the kids out of the System Folder. He wants a Mac that's not so easy for a kid with a screwdriver to open, one that has enough hard drive space for his and all the kids' stuff, a moderate processor, easy Internet connectivity (a built-in modem would be nice), and bundled software. Expandability and upgradability aren't top concerns, because it's questionable whether the Mac will survive this punishing environment for many years. Price and bundled software (pre-installed is even better) are paramount concerns.

The Profile

AGE: 41
RESIDENCE: A nice suburban ranch-style house
HEIGHT: 5' 10"
WEIGHT: 234 lbs. (he's been meaning to join a gym)
FAVORITE MOVIE: *Parenthood*
LEAST FAVORITE MOVIE: *Parenthood*
MEMORABLE QUOTE: "Gail, Gail! Get out of the dog food! Spit it out!"

NEEDS: Low price, bundled software, Internet connectivity, moderate processor **WANTS:** Ease of use **DOESN'T CARE:** Fast hard drive, networking, lots of RAM

The Choices

1 Power Computing PowerBase 200LP

For less than $1,400, Harry can get a pretty darn fast (200MHz 603e) and capable (16MB of RAM, 2GB hard drive) machine, complete with a good dose of home and educational software. And if in a year or so the kids think it's too slow, the processor's upgradable.

2 UMAX SuperMac C500

This bargain leader comes in at less than $1,000 (happy news to parents worrying about orthodontia) and runs a 603e at a neat 180MHz, with 16MB of RAM and a 1.2GB hard drive backing it up. No 3D acceleration, but 16-bit SRS stereo sound comes out of its built-in speakers.

3 Apple Power Mac 6500/225

If Harry wants a bit more out of life (or at least his computer), he could go with this tall fella, which for less than $1,800 sports a 225MHz 603e, 32MB of RAM, a 3GB hard drive, a built-in 33.6Kbps modem, and family-type software such as Intuit's Quicken Special Edition, ClarisWorks, and the Mayo Clinic Family Health.

Mach 5 A high-power not-quite-third-generation PowerPC chip; uses a smaller manufacturing process but otherwise the same as a 604e

- **Cache:** Separate data and instruction caches at 32K each
- **Speed:** Just faster than a Pentium II at the same megahertz
- **What it's good for:** Desktop Macs
- **Size:** 5.1 million transistors spaced at 0.25 microns (shrank from 148 square millimeters to 47 square millimeters)
- **Just starting to make it to market**

750 A high-power, third-generation PowerPC chip that consumes little electricity; uses a new architecture to get lots of performance; related to the 603e; also known as Arthur or G3

- **Cache:** Separate data and instruction caches at 16K each (The 604e has 32K caches.)
- **Speed:** Optimized for integer calculations
- **What it's good for:** Desktop Macs and PowerBooks
- **Size:** 5.1 million transistors spaced at 0.25 to 0.5 microns
- **Still being used**

If you're wondering which chip you should hitch your hopes to, look beyond benchmarking numbers. The 750 is optimized for integer calculations, so it's best for number crunching, but the 604e is more capable with floating-point calculations, so people doing heavy 3D work might do better with this chip. Take this advice with a grain of salt, and look at the whole system before buying.

Art the Businessman

Art sometimes runs a home business, sometimes a small office—depends which kind of Art you are. Art relies on his Mac to do inventory, payroll, fax, and email correspondence, maybe some desktop and/or Web publishing for ad creation. Compatibility with the unenlightened business world is important, so Art needs a Mac that can run Microsoft Excel (if the Mac comes with it bundled, all the better) and maybe has Apple's PC Compatibility card or Connectix Virtual PC. Connectivity to other Macs, PCs, and printers in the office is absolutely necessary. Art's Mac doesn't need blinding graphics speed, huge storage, or much expandability, though some would be nice. Upgradability is also important, so that Art's company can "leverage" existing technology investments (oh, how he has wanted to use that word).

The Profile

AGE: 36
RESIDENCE: A Cape Cod-style house in Wichita, Kansas
HEIGHT: 5' 7"
WEIGHT: 148 lbs.
FAVORITE MOVIE: *Vacation* (hey, he can fantasize about some time off, you know)
LEAST FAVORITE MOVIE: *Rollover*
MEMORABLE QUOTE: "I told you that you should have bought AAPL at 13.50."

• • •

NEEDS: Moderate price, compatibility, networking

WANTS: Bundled software, expandability **DOESN'T CARE:** Fast hard drive, removable media

The Choices

1 Apple Power Mac 4400 Small Business Edition

Boy, was Apple thinking about Art when it put together this package or what? The 4400 usually comes with a 200MHz 603e and built-in Ethernet, but the less-than-$1,800 Small Business Edition adds RAM (to 32MB), a faster CD-ROM drive (to 12X), a built-in 33.6Kbps modem, and more business software than you can shake a ledger at: Microsoft Office, Norton Utilities, Now Up-To-Date and Contact business planners and fax software, and more. If Art wants to put more leverage into his investment, an extra $600 will get a PC Compatibility card.

2 UMAX SuperMac C600x

This mini tower costs less than $2,000 but includes a 240MHz 603e, 32MB of RAM, a 3GB hard drive, a 33.6Kbps modem, and built-in Ethernet. Three PCI slots and four drive bays give plenty of room to grow, and the included ClarisWorks and Now Contact and Up-To-Date will give Art a start. If he wants to run Conntectix Virtual PC or Insignia RealPC, both of which are very sensitive to cache size and speed, UMAX's CacheDoubler technology should give these emulators a leg up.

3 Power Computing PowerBase 200

Although this PowerBase has only 16MB of RAM and a 2GB hard drive, upgrades are options directly from Power Computing, and given its low price (less than $1,500), Art can go wild with other purchases.

CACHE COWS

Just when you thought you had a handle on cache (see "Make the Most of Megahertz," Jul/97, p28), there's another kink in the cache saga. It used to be there was Level 1 (on-chip) and Level 2 (on-motherboard) cache. More was usually better, but for even 200MHz processors, 512K was probably enough, because the bus speed (i.e., how quickly data moves between the processor and the cache) became the bottleneck. However, with processor speeds shooting through the roof, this traffic jam had to be broken.

Here's where it gets confusing, because not every Mac maker uses the same technology—or terms. UMAX Computer offers its proprietary CacheDoubler technology, which connects inline cache to the processor on a special bus that runs at twice the system's bus speed. This can offer an overall system speed boost of up to 15 percent, and it works on all CacheDoubler-enabled systems—603e and 604e—from UMAX. Apple's new Power Mac 8600 and 9600 lines also use this inline scheme, placing the cache on the processor daughtercard; though this does allow 100MHz data transfer rate, it also means the amount of cache isn't upgradable.

Even more exciting is the backside cache technology of the 750 processor. The 750 has built-in connectors from the processor to extra (non-L1, non-L2) cache, and this connection can run at speeds up to that of the processor. As a result, there's no delay: When the processor needs data, it doesn't waste processor cycles waiting. Neither of these innovations will obviate the need for L2 cache,

Paulina the Multimedia Maven

Whether it's graphics for prepress or Web pages, video for kiosk presentations or Web pages, or 3D modeling for animation, or—wait for it—Web pages, Paulina has her repetitive-stress-injury-plagued fingers in it. She makes her living with Adobe Photoshop, MetaCreation's Painter, QuarkXPress, and Specular's Infini-D. She scans high-resolution photos, manipulates huge graphics and line art files, and regularly sends it all off to prepress service bureaus. Paulina needs a powerful processor, a lot of storage, and removable media so that she won't have to send half a gig to the print shop via modem. Ultra SCSI is a plus so she can keep multiple edits of her video epic, *Grandma's Great Fun Holiday*, ready for reconsideration. Also on her wish list is oodles of RAM, a fast machine, a good graphics card, expansion bays (never know when 2GB will run out), and easy upgradability.

The Profile

AGE: 37
RESIDENCE: A South of Market loft in San Francisco
HEIGHT: 5' 6"
WEIGHT: 119 lbs.
FAVORITE MOVIE: *Creature Comforts*
LEAST FAVORITE MOVIE: *Mr. and Mrs. Bridge* (jeez, that was slow)
MEMORABLE QUOTE: "Static sucks."

NEEDS: Fast processor, extra RAM, graphics card, large hard drive, expandability, upgradability, removable media

WANTS: Fast hard drive, Internet connectivity **DOESN'T CARE:** Bundled software, low price

The Choices

1 Apple Power Mac 9600/350

Apple bills this as the "World's Fasted Personal Computer." The $5,300 9600 has a 350MHz Mach 5 604e processor, which is particularly good for 3D applications (see "Bytes Are Your Food...") and 1MB of *inline* cache (see "Cache Cows"), and retains the easy-open case design, so you can fill the four 5¼-inch removable bays, three internal bays, and the five free PCI slots. The sixth slot has an IXMicro 128-bit Twin Turbo graphics card. The 64MB of RAM and 4GB hard drive are a good start for someone like Paulina. However, the bus speed is 50MHz, and the cache can't be upgraded without upgrading the daughter card.

2 Power Computing PowerTower Pro 250

Big name, big machine. It's basically the PowerTower Pro we've already liked a lot, but now it has a 250MHz 604e processor. For $4,600, you get 64MB of RAM, a 2GB RAID array hard drive with Ultra SCSI card, and the same graphics card as the Power Mac 9600. There are a lot of internal bays and PCI slots, but the internal design of the PowerTower Pro doesn't make it particularly easy to reach all of them.

3 UMAX SuperMac S910/250

Just released, the S910/250 has some elegant features including PCI bridge technology, easy addition of a second processor, and interleaved memory. Let's not forget the basics, though. For $4,395, you get a 250MHz 604e, 64MB of RAM, a 24X CD-ROM, the same IXMicro card as the Power Mac 9600 and the G3 750/275, six PCI slots, a 4GB Ultra SCSI hard drive, and seven expansion bays for new drives.

especially when working with large files, but "My L2 is bigger than your L2" is no longer a critical marketing cry.

YEAH? SO'S YOUR MOTHERBOARD

Earlier this year, there were only a few motherboard designs from Apple (the Power Mac 4400 and the 9600 use different boards, for example), and all Macs and Mac clones worked off variations of these designs. Occasionally, there'd be a tweak here or there, such as when Power Computing jacked up the PowerCenter Pro's bus speed to 60MHz, but that was about it.

That was all about to change with the Common Hardware Reference Platform (CHRP), but Apple's unwillingness to license the Mac OS for CHRP have put a halt to almost all CHRP development. In an ideal CHRP world, the Mac OS software is unlinked from hardware design (in the past, you couldn't change one without the other), which opened the field to innovation. By the time you read this, Motorola should be selling its CHRP-based design, the StarMax 6000 line, with a new system bus running at 66 to 80MHz, PC-standard PS/2 connectors and serial port, and other changes. It ought to be mighty fast.

QUICK UPGRADE

Sure, a shiny new machine evokes sheer lust. But equally strong in some of us is the stingy-old-coot reflex that urges us to make do with what we've got. Is there a way to balance these two forces? With sagacious use of upgrading, perhaps. If you

Category Champs

BEST BARGAIN: Strike up the band, it's under a grand. OK, it's not the second coming of Tin Pan Alley, but UMAX Computer's SuperMac C500 warms our cheap little hearts by being the first Mac compatible to dip below the $1,000 mark. Best of all, for this paltry amount of dosh, you don't get a stripped-down machine; the C500 comes with a 180MHz 603e processor, 16MB of RAM, a 1.2GB hard drive, an 8X CD-ROM drive, 256K of Level 2 cache, and a bundle of useful software, such as ClarisWorks and Adobe PageMill.

HOTTEST ROD: Although it doesn't make use of the PowerPC 750, the Power Macintosh 9600/350 is the fastest Mac around. Centered on a 350MHz Mach 5 604e processor, this speed demon has 1MB of inline cache which only adds to its performance. Despite the system's 50MHz bus speed, bits move awfully quickly through the system. For just more than $5,300, the 9600/350 also comes with five free PCI slots (the sixth is filled with an included IXMicro 128-bit Twin Turbo graphics card), 64MB of RAM, and 4GB of hard drive space in a well-designed tower case that's a pleasure to crack open.

MARATHON MAC: It's a truism that computer speed and capacity double every, oh, time you blink. What's the best inexpensive long-term choice? Well, there's no totally safe answer, but the Power Mac 7300 is a fast, capable machine today for around $2,000 and has an easily expandable design. Not only are the three PCI slots and RAM reachable, but the processor daughtercard can be swapped in about two minutes, and there's room for you to install both a removable drive and a second hard drive.

IT'S JUST GREAT: Power Computing's PowerCenter Pro is surprising, mostly for what it packs in at a modest price. For less than $2,700, you get a 240MHz 604e running on a super-tweaked 60MHz bus, 32MB of RAM, 1MB of L2 cache, an accelerated SCSI hard drive, built-in Ethernet, and a nice software bundle. A few months ago, this little number would have clocked in as one of the fastest Macs available. And though older PowerCenters use to sound something like a jet taking off, this model is as quiet as a cat burglar. A good cat burglar.

D. D. Turner is just a little jealous that you may be buying a new Mac. Lucky dog.

have a 68K Mac, your choices are limited. There are processor and motherboard upgrades, even some that will bump you up to a PowerPC chip, but the cost versus limited performance (none will bring you up to the performance of even an entry-level Power Mac) makes this not such a winning proposition. Also, future versions of the Mac OS may not work on such upgraded systems.

Look up your machine in our ongoing This Old Mac series to see what's available. Still, it might just be time to bite the bullet and invest in a new Mac. After all, Quake runs on only a Power Mac.

Beginning with the Power Mac 7500, almost all Apple computers use a motherboard design that places the processor on a separate, removable daughtercard (Alchemy- or Tanzania-based systems such as the 7200, 6500, and 4400 do not use this motherboard design, so their processors aren't upgradeable).

What this means is you can purchase a CPU upgrade card from companies such as Newer Technology (http://www.newertech.com; see review, Jun/97, p70), XLR8 (http://www.XLR8.com), or PowerLogix (http://www.powerlogix.com), open up your Mac's case, swap daughtercards, and then restart your Mac, which should be noticeably faster with it's newer, faster microprocessor.

Processor upgrade cards with 604e chips are available starting at $350, and ones with the new 750 chip should be available by the time you read this, priced in the $1,000 to $1,500 range.

MacUser R.I.P. 1985-1997

BY CHERYL ENGLAND

In the beginning there was *Macworld*. And *Macworld* was a serious magazine, a classy magazine, and, most important, the only Mac magazine. But then, nearly two years after *Macworld* made its debut, *MacUser* splashed onto the scene with its funky art and distinctly Macintosh look and feel.

Now, 12 years later, *Macworld* and *MacUser* are merging. The magazines' parent companies, IDG Communications and Ziff-Davis, respectively, are creating a new, joint venture called Mac Publications (known as the "JV" to staffers). Only one monthly magazine will be published by the group, and its name will be *Macworld*. No one is quite sure yet which elements from *Macworld* and which from *MacUser* will survive in future issues, but one thing's for sure—the publication called *MacUser* is gone.

Some people say that *MacUser*'s demise is bad for the Macintosh industry. But we think not. During the course of its 12 years of existence, *MacUser* changed from being a funky alternative to *Macworld* to being a direct competitor. And, in the last year, *MacAddict* has stepped in to fill the shoes that *MacUser* once wore as the alternative magazine. The merger makes good business sense for *Macworld* and *MacUser*, and it leaves *MacAddict* in a good position as the second largest Mac monthly. Here's the story of how *MacUser* went from funky to formal and a look at the groundbreaking items it implemented along the way.

MacUser's first issue, in October 1985, simply screamed Macintosh, from the cover with its MacPaint-style art to the inside with its plays on Macintosh conventions, such as headings that looked like pull-down menus. The magazine had sections with names such as About MacUser (the staff masthead), The Editor's Desktop (a column from the editor), New on the Menu (news), and QuickClicks (short reviews). There weren't any photos of columnists, just icons; and a Macintosh close box—drawn as though it was just being clicked—ended each article.

Even the articles in *MacUser* told you that this was a magazine for true Mac users. There were goodies on topics such as setting up a file server, composing music on the Mac, role-playing fantasy games, icon creation, and working with DAs (desk accessories—remember them?). And *MacUser* beat *Macworld* to the product ratings punch by several years when, in the first issue, the magazine introduced the trademark mice ratings as well as MiniFinders (a monthly synopsis of all previous reviews of currently shipping products).

MiniFinders turned out to be a pivotal idea for *MacUser*. As the database of ratings grew, readers turned to MiniFinders whenever they had a product buying decision to make. Vendors, in turn, would kill for a good rating—and rage when they got a bad one. *MacUser* even published a special 13th issue in 1993 that contained a collection of MiniFinders—more than 1,500 products were rated.

But in the early 1990s, *MacUser* dropped MiniFinders, leaving the door wide open for *Macworld* to enter with its Star Ratings. In dropping MiniFinders, *MacUser* unwittingly did *Macworld* the biggest favor it had ever done for the other monthly. *MacUser*, however, had by then moved on to place more emphasis on lab-based testing and product awards.

GROWTH OF THE LABS

Early in its life, *MacUser* led *Macworld* in two other important areas: annual product awards and lab-based testing. In January 1986, *MacUser* introduced the Editors' Choice Awards, nicknamed the Eddies by Lisa Orsini, *MacUser*'s associate art director at the time. The Oscar-like statue was awarded to 21 products that year, including Excel (a winner in four categories, including Best Overall Program), PageMaker, MacPaint, MacDraw, MacWrite, and ThunderScan. Not until a year later did *Macworld* start an annual awards program, mostly due to pressure from vendors that were desperate to win an award which they could trumpet to potential customers.

Similarly, in its drive to honor products, *MacUser*'s October 1987 issue included an article on laser printers, called "Laser Wars." Freelance author Henry Bortman tested four laser printers (all that were available at the time), replete with output samples, speed tests, and a table listing specifications and features for each product.

The first official MacUser Labs Report, and the first official Labs logo, didn't appear for another five months. By then *MacUser* had set up a testing facility and had begun to put standardized testing procedures into place. The Labs tested nine Mac Plus and SE accelerators. The speed charts were fancy, colorful, and 3D. The specifications table included information on hardware and software. In short, it was a more thorough review than anything any Mac magazine had published to date.

In the long run, MacUser Labs would grow to become a vastly expensive operation. Ziff-Davis sunk nearly one million dollars into creating the NetWorkShop, a huge lab of interconnected Macs, designed to test networking products. At first, the NetWorkShop was heavily used, but as the Mac grew less and less important to the IS world, the lab grew quiet. Ziff-Davis Publishing (the company that had bought *MacUser* from the founding company, Felix Dennis' MacUser Publications) then dumped even more money, upwards of 10 million dollars, into an off-site facility called ZD Labs that would, theoretically, become a shared resource.

1985

The premiere issue was funky, fun, and, above all, extremely Mac-like. From the clever cat-and-mouse pun on the cover to the Macintosh look-and-feel touches inside, the magazine offered readers a clear alternative to the staid *Macworld*.

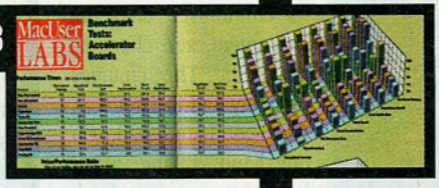
1992

MiniFinders, which debuted in the first issue, were an instant hit with readers and vendors alike. Probably the biggest favor *MacUser* ever did for *Macworld* was to take MiniFinders quarterly in the late 1980s and then to kill them off entirely in the early 1990s.

1986

Fondly called the Eddies (short for Editors' Choice Awards), *MacUser*'s annual awards for the best products of the year became a prize that vendors fought to get. The awards ceremony was every bit as glitzy as the Oscar-style trophy suggested.

1988

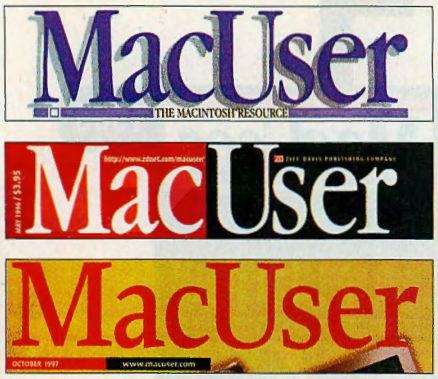


The first MacUser Labs Report boasted detailed tests, fancy 3D charts, and comparison tables. Later the labs would become vastly expensive to operate.

1989

1989

Under Paul Somerson as editor-in-chief, *MacUser*'s covers became flashy and frequently a bit too sexist for its audience. At left: Somerson's first cover. At right: the first of a series featuring thin, blonde female models.



MACUSER ALWAYS had an innercap *U*, unlike *Macworld* with its lowercase *w*. At top, the original logo; middle, the longest-lived logo; bottom, the final logo.

THE PIONEER IN MAC LABS, *MacUser* created its first logo (center) in 1988, another (top) in 1989, and the final one (below) in 1995. Others existed as well.

THE LANDMARK MICE changed from the bitmap version of the first issue to fat mice in 1994 and finally to tail-less ones in 1997.

THE FOUNDING TEAM

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WEST COAST EDITOR
Michael D. Wesley
FEATURES EDITOR
Richard Herbst
TECHNICAL EDITOR
Steven Bobker
ASSOCIATE EDITOR
Tracie Forman Hines
ASSISTANT EDITOR
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David Biedny, Dennis Brothers, Doug Clapp, Dan Cochran, Ian McKinnell
CONTRIBUTING ANTI-EDITOR
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R. Wippo Meckler
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Lisa Orsini
DESIGN ASSOCIATE
Peter King
ART ASSISTANTS
Paul Bob, Carine Fraley

PUBLISHER
Felix Dennis
NATIONAL ADVERTISING DIRECTOR
Steven J. Rosenfield
ADVERTISING MANAGERS
Meredith Browning, Gary Meyer, Christine Pines

The technicians who staffed ZD Labs would create well-researched, accurate tests that any of the Ziff-Davis magazines, such as *PC Computing* and *PC Magazine*, could use. Although the idea sounded great, it never worked well in practice—the magazines had to schedule and negotiate time and resources with the lab months ahead of schedule, and even then, there was little flexibility for accommodating changes in a fast-paced market. *MacUser* ended up keeping a separate lab up and running anyway to get the test results it wanted quickly.

MacBench was born out of the lab focus. Developed by *MacUser* (with Technical Director Henry Bortman in charge) and a Ziff-Davis operation in North Carolina called, affectionately, ZDBOP (Ziff-Davis Benchmark Operation), MacBench provided a standard set of benchmarks that vendors could use to test the speed of products. Even Apple uses MacBench to test new Macs. MacBench was another costly project, but it did award a certain amount of industry notoriety to *MacUser*.

THE CHANGE GAME

Business issues aside, *MacUser*, unlike the staid and steady *Macworld*, was constantly changing over the years: changing its editor-in-chief, changing its columnists, changing its content, and changing its focus. The changes certainly had their effects, both good and bad. On one hand, all the variety kept the magazine fresh and forced editors to try new approaches. On the other hand, the changes were disruptive for the staff and for the readers. With *MacUser*, you never knew just what you were going to get from month to month.

There were columnist John Dvorak's April Fools' pranks, such as the column in which he claimed to have quit and the one that could be read only by looking at it in a mirror. There were Guy Kawasaki's rambling and witty columns. There was the Help Folder, written for a while by Chris Espinosa, one of Apple's earliest employees and the person responsible for the original Mac's documentation. There was a brief stint by Freff as the music columnist. There were the funky covers of the first few issues under the founding editor-in-chief, Neil Shapiro. There were the flashy, and sometimes sexist, covers produced by Editor-in-Chief Paul Somerson during 1989 and 1990. And there were the more practical covers and the tons of puns ("Hop on the Nubus, Gus" and "Taipei Behavior," among others) that cropped up during Editor-in-Chief Jon Zilber's reign.

And then there were the full-fledged, first-of-their-kind experiments. For example, *MacUser*, way back in April 1986, was the first to distribute software with a magazine. Well, sort of, anyway. Printed in the magazine were strips that looked a lot like bar code. The idea was that, using a Cauzin Reader, you would scan in the strip and load the file into any word processing program. Double-click the icon, and boom, you'd launch a working program. Unfortunately, the idea never took off, mainly because the Cauzin Reader bombed as a peripheral—it just didn't work.

A MERGER? WHO'DA THUNK IT? The covers of the October 1997 issues of *MacUser* and *Macworld* show just how much alike the two magazines had become.

DOWN MEMORY LANE

During the last few years, *MacUser* began to focus more on lab-based testing and product reviews.

Much of the original Mac-ness was removed—even the New on the Menu section was renamed simply News in 1996. A redesign earlier this year, however, did give *MacUser* a cleaner, brighter feel, making it a looser, livelier alternative to *Macworld*.

Even so, a merger makes sense. *MacUser* and *Macworld* had been growing more alike in look and focus over the past few years. Just check out the October 1997 issues of each—the colors, the subject, and even the angle of the photographs are nearly identical. And as the number of products for the Mac shrunk—as did revenues for vendors of Mac products—the number of advertisements in the magazines dwindled. Vendors could no longer afford the high ad rates that the two magazines needed to support the staff, the labs, and the rest of the infrastructure that had grown during the heyday of the Mac. *MacUser*, for example, went from a high of 418 pages in the September 1988 issue (with a cover subject about connecting Macs to DOS computers, no less) to 152 pages in the final issue.

Still, no matter the reason, there's one less Mac magazine in the market these days. We'll miss the familiar title on the newsstand, but we wouldn't be surprised to see at least a few *MacUser* contributions pop up in the new *Macworld*. Here's to what the next 12 years of Mac magazines brings.

Cheryl England, editor-in-chief of *MacAddict*, worked at *MacUser* for three years and at *Macworld* for five.

Introducing...
MacAddict Network
The One Stop for Mac Fanatics

It's easy to get lost on the Internet. There is so much information, how do you find what you really need?

Finally, there is one place that you can go to satisfy all of your needs as a MacAddict. From news to reviews, from games to graphics, from troubleshooting to Rhapsody, you can feed all of your Mac cravings with the MacAddict Network. MacAddict has brought together the best Mac websites in one convenient location.

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The Complete Conflict Compendium
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Version Tracker
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AppleJedi
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www.dailymac.com

WHO MAKES WHAT—AN INDEX OF MAC AND MAC-COMPATIBLES
The Macintosh Guidebook
www.everymac.com

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reviews

Plagues, famine, nuclear war—and that's just the first page.

Civilization II

COMPANY: MacSoft
CONTACT: 800-229-2714, http://www.wizworks.com/macsoft
PRICE: $44.99 (SRP)
REQUIREMENTS: 68030 or faster, System 7.1, 8MB of RAM, 15MB of hard disk space, color monitor, CD-ROM drive

FREAKIN' AWESOME

SPIFFY

YEA, WHATEVER

BLECH!

Sid Meier's Civilization II is one of the best games ever made. The game is so well balanced that its replay value is counted in years, not months or days. The goal is simple: As the leader of a band of settlers in 4,000 B.C., grow your civilization to the point where it can colonize outer space or kill all other civilizations before they can do the same.

Settlers build cities that produce military units to explore and conquer the world, and buildings that improve the economy and technology. Ignore any of these elements at your peril. Without research, your military units won't get more powerful. Without banks, you can't pay for upkeep on your city. Without exploring, you won't know where your enemies are. Without an army, the most primitive civilization can conquer you.

Civilization II is a celebration of humanity. From the meanest ancient hovel, to the most advanced battle cruiser, the game incorporates just about everything the human race has ever done. Gunpowder and nuclear fission are balanced by mysticism and refrigeration. These civilization advances allow various units, such as dragoons and marines, and city improvements such as aqueducts and airports. Wonders of the World are special city improvements that commemorate significant accomplishments in human history, and give benefits to the city that builds them.

Sound familiar? Civilization II is a new version of Civilization, which was originally released in 1992 by MicroProse. While it uses the same concepts as the original, right from the get-go you can see enhancements. There are more civilizations to play, and you have the option of being male or female, which results in a different default name. The world map is now in isometric view as opposed to a flat earth, and has much better graphics. Overall, the entire game has better graphics than the original. One absolutely fabulous improvement is the automation of settlers—you can send them out

THIS WORLD MAP is your main view to your civilization. From here you direct the movements of your armies, ships, settlers, and other units. You can also see the effects on the landscape of the improvements your settlers and engineers create. INSET: The up and down arrows on the upper left of the window let you zoom in and out of the map. This magnified view of the same landscape one hundred years later shows subtle changes: Mining near Hladir has caused pollution, industrial brick has been changed to modern skyscrapers, and Viborg now has patches of farmland.

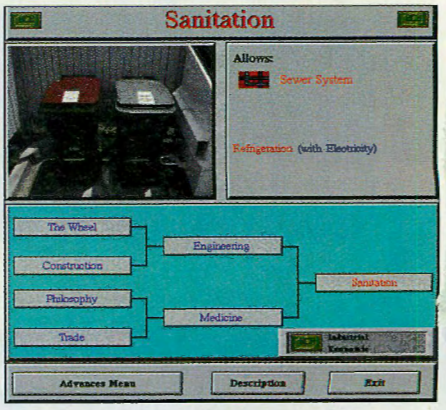
Must-have Wonders

ADAM SMITH'S TRADING COMPANY—pays maintenance fees on all city improvements that otherwise would cost one gold per turn. Requires economics.

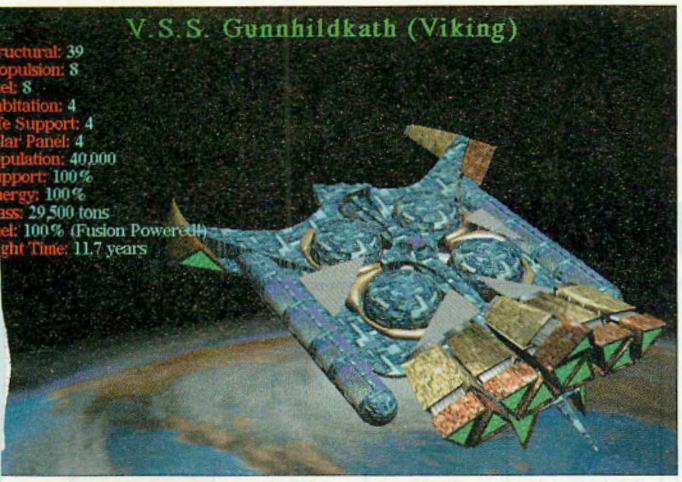
MICHAELANGELO'S CHAPEL—acts as a cathedral in every city. Requires monotheism.

PYRAMIDS—act as granaries in every city. Require masonry.

LEONARDO DA VINCI'S WORKSHOP—upgrades units when you get civilization advances. For example, phalanxes get upgraded to pikemen, which get upgraded to musketeers, and best of all, settlers get upgraded to engineers. Requires invention.



THE CIVILOPEDIA IS YOUR ONE-STOP reference site. It's a separate application that is linked to civilization advances. Each advance allows city improvements, more advances, or Wonders of the World. Look up what you need to get a certain advance or see a description of how the particular entry affected the real world. All colored words are hyperlinks.

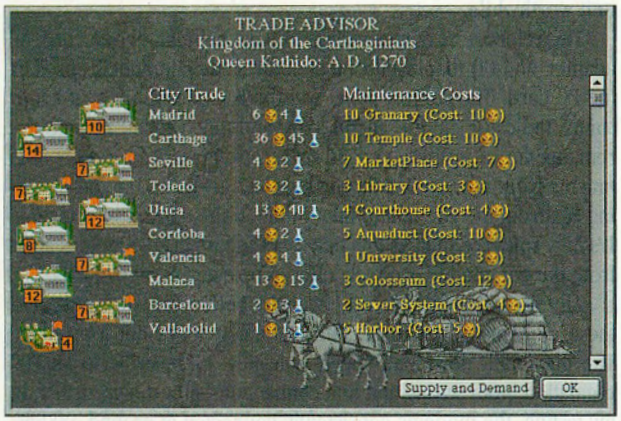


THE V.S.S. GUNNHILDKATH IS MAXED-OUT to the limits of the ship design. Note the numbers of each component, as the game doesn't tell you how many you need of each.

MANAGE YOUR CIVILIZATION from each city's screen. At a glance, you can see how many people are happy, content, or up in arms; how much food, trade, and production units the city makes each turn; how far along construction is on your current city improvement, and which improvements you've already built; also shown are the units the city supports, and which are fortified for defense of the city. Click on the View button to see how the city looks from an aerial shot. In this modern view, primitive huts have been transformed into tract housing, superhighways improve production, and a supermarket adds to the food supply.

on their own to build roads and irrigation. While this frees you from some micromanagement, you do have to watch that they don't make too many mines on hilltops, or you'll be plagued with pollution and famine toward the end of the game.

Civilization II actually uses multimedia for good, not evil—it enhances the game instead of getting in the way. Each Wonder of the World has a video showing its history, which also explains the benefit you get from building it. Your high council is composed of five advisors. Click on these advisors' buttons, and they tell you, in QuickTime videos, how the various aspects of your civilization are doing. You also get sound effects when you finish a building, when a military unit is fighting (the elephant trumpeting is cute), when a city is in revolt, or when you complete a Wonder of the World. Game options allow you to turn these off if you wish.



ALTHOUGH THE HIGH COUNCIL can give you general advice, you'll want to consult your advisors on a more regular basis. The trade advisor sums up the output of each city and how much each city improvement costs to maintain. Additionally, you can check out the supply and demand for resources produced by your cities, in order to create the best caravan routes.

For those who made it past the warlord level in the original: don't even bother playing on the chieftain (easiest) level. Unlike the original Civilization, which could present a challenge on this level, Civilization II's chieftains are way too easily subdued. You'll conquer the world before you even get gunpowder. Even the warlord level is not as difficult. On the other hand, Civilization II rounds out technology enhancements in the modern era, which used to end in a manufacturing plant. Now there are supermarkets, stock exchanges, superhighways, offshore platforms, and airports. Be sure to conquer aggressive civilizations before they get to the modern era because they *will* use nuclear weapons. Tip: Establish embassies with the other civilizations in order to check on aggressiveness.

It took about 15 hours to play the small game to completion culminating with the launch of a spaceship. A larger game can take well over a week. Once you've mastered the art of guiding a civilization to the end game several times, you may want to start tinkering. The scenarios that come with the game start you out with prebuilt civilizations and give you an objective to meet. There are also plenty of Civilization II scenarios created by PC users available for download on the Internet. To use them, you need to change the creator and type codes (with a utility such as Snitch) to match the codes of the scenarios that ship with the game. And if that doesn't satisfy you, Civilization II comes with a world builder and a cheat mode that lets you create your own scenarios.

Civilization II really is a great game for a personal computer. First-person perspectives can be had on any platform, while console machines lend themselves well to games on a track (think Wipeout or Sonic). It takes a big hard drive and more RAM than your average PlayStation to manage and store the complex model of an entire world, and it take lots of keys to direct your minions. It's this complexity that gives Civilization II its legs—you'll be playing it for years to come.—*Kathy Tafel*

FIND A DEMO of Civilization II and Snitch on The Disc.

FIND A BUNCH OF PC scenarios at http://www.glyphweb.com/civ2.html or visit the Mac Civilization II page at http://www.connix.com/~rrome/civII.html.

Laundry List

THE SCROLL THUMBS in the tax rate window occasionally disappear, leaving you to move bits of the background left and right.

WE'D LIKE TO SEE default buttons outlined, especially in the city screen and civilopedia entries.

THE CIVILOPEDIA APPLICATION has no menu bar. You can work around this by clicking in the menu bar's general vicinity to make it appear.

THE SUPPLY AND DEMAND WINDOW doesn't alphabetize the resources.

GOOD NEWS: Improved graphics from original, improved interface from PC version. Don't need CD-ROM to play. Runs adequately on 68K machines.

BAD NEWS: Some interface quirks (see Laundry List). No Net play. You will wonder what happened to all your free time.

reviews

Two 56Kbps Fax Modems

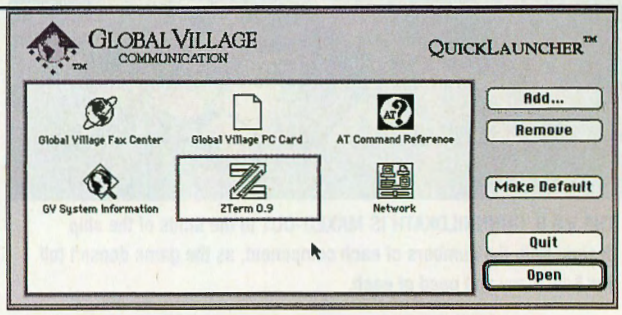
COMPANY: Global Village Communication
CONTACT: 800-736-4821, http://www.globalvillage.com

K56flex Modem/Ethernet PC Card

PRICE: $379 (SRP)
REQUIREMENTS: PowerBook 190, 1400, 2400, 3400, or 5300 series machine; System 7.5 or later; 8MB of RAM; 8MB of hard disk space

TelePort x2

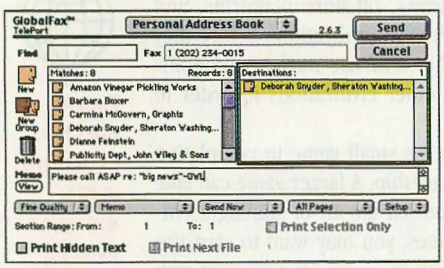
PRICE: $219 (SRP)
REQUIREMENTS: 68020 or faster, System 7.1 or later, 4MB of RAM, 8MB of hard disk space, CD-ROM drive



THE QUICKLAUNCHER WINDOW offers an easy way to open telecom programs. It appears if you double-click the PC Card modem's icon.

If you want to surf the Web as fast as possible over regular phone lines, then Global Village has a modem for you. The K56flex Modem/Ethernet PC Card and TelePort x2 are portable and desktop modems, respectively, representing the two competing ways of receiving 56K bits per second (bps): K56flex and x2. Although based on opposing technologies and designed for different environments, both modems are remarkably similar in operation.

Both the K56flex and x2 technologies allow for downloads at speeds of up to 56Kbps, uploads at up to 33.6Kbps, and faxing at 14.4Kbps, but they're not compatible. To achieve maximum throughput, you must have like modems at each end of a connection, otherwise they top out at 33.6Kbps, so most people buy whatever technology is supported by their Internet service provider (ISP). An international 56Kbps standard is expected in early 1998, and Global Village promises its modems will be software-upgradable, allowing both kinds of modems to talk to one another at top speed. A K56flex version of the TelePort is also available for desktop use; however, Global Village does not offer a PC Card modem with x2.



GLOBALFAX IS SUPERSIMPLE. It allows files to be faxed from any program as easily as printing.

The K56flex Modem/Ethernet PC Card comes with the obligatory America Online disk, plus phone cord, Ethernet cable, GlobalFax software, and a robust phone line connector with surge protection circuitry. To get set up, install the control panel, Chooser driver, Fax Center application, ZTerm telecommunications application, and GV System Information utility from floppies. Then restart, insert the PC Card in a PC Card slot, attach the cables, and you're done. The modem's icon appears on the desktop instantly. Double-click it to open the QuickLauncher window revealing icons for all the telecom software. This is a neat feature, and you can change what appears here.

Global Village's PC Card modem takes hot-swapping to another level, allowing you to insert and remove the PC Card modem without restarting the PowerBook, even when a telecom application is open—just not during a live connection. On a PowerBook 190, the modem's icon sometimes disappeared when waking from Sleep mode due to a known problem with Apple's Card and Socket Services technology (this doesn't affect late-model PowerBooks).

The K56flex Modem/Ethernet PC Card can connect to a 10base-T Ethernet, AppleTalk Phase 2 network, even as you use the modem. At present, Global Village is the only vendor offering a K56flex PC Card modem with Ethernet capabilities. For $100 less, you can buy the model without Ethernet. That's about $30 more expensive than the cheapest K56flex PC Card modem I could find, but the nice software makes the Global Village unit worthwhile.

The TelePort x2 comes with a 53-page manual, phone cord, AC adapter, and CD that installs most of the same components used by the PC Card. The control panel with both modems places a handy status indicator in the menu bar, and the GlobalFax software remains the easiest way to send or receive faxes. You can fax documents from any application by holding down Option and choosing Fax from the File menu, then filling in the contact information. It's nifty software such as this that sets Global Village modems apart from the commodity products offered by many other vendors.

All the cool software in the world wouldn't be worth a darn if these modems weren't fast, but fortunately that's not a problem. The maximum download speed is legally 53Kbps due to an FCC regulation; poor wiring and line connections slow things further. In my testing, the modems consistently connected at around 48Kbps; about what most users report for 56Kbps modems in general. This speed is noticeably better than my old 33.6Kbps modem. Files download much quicker, and even Web sites with lots of graphics appear faster. *—Owen W. Linzmayer*

K56flex Modem/Ethernet PC Card

GOOD NEWS: Fast downloads. Software-upgradable to new standard. Robust phone line connector. Good documentation. Excellent software. Simultaneous modem/Ethernet use. Five-year warranty.
BAD NEWS: QuickLauncher doesn't support drag-and-drop. Modem icon occasionally disappears when waking from Sleep mode.

TelePort x2

GOOD NEWS: Fast downloads. Software-upgradable to new standard. Good documentation. Excellent software. Five-year warranty.
BAD NEWS: Premium pricing.

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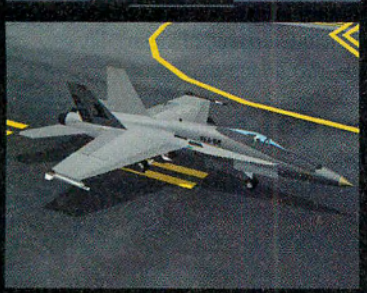

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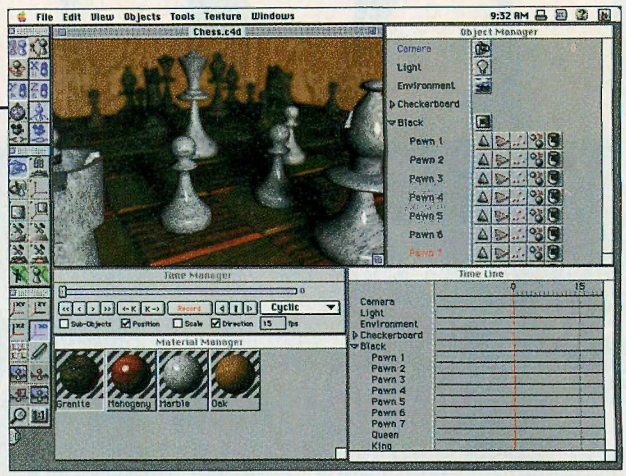
Cinema 4D

COMPANY: Maxon Computer
CONTACT: 011+44+1525-718181 (England), http://www.cinema4D.com
PRICE: $699 (SRP)
REQUIREMENTS: PowerPC 601 or faster (604e recommended), System 7.0 or later, 16MB of RAM (64MB recommended), CD-ROM drive

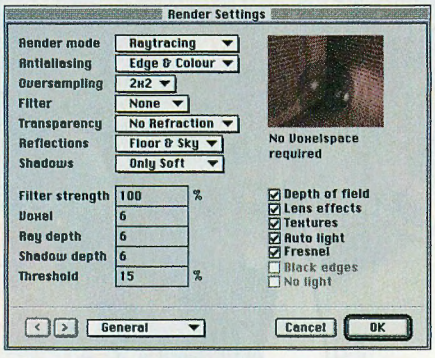


CINEMA 4D'S INTERFACE includes palettes to control almost everything. The Object Manager (upper right) controls hierarchies and many of the object parameters. The Time Line and Time Manager control keyframe animation. The Material Manager gives access to surfaces. Note the depth of field displayed in the object view.

Cinema 4D boasts solid animation tools, an exceptional renderer, a fairly low price, and a position in the medium range of the 3D market. It could become a popular package, or it could flop—it has yet to prove itself in the hands of real users.

The renderer is where Cinema 4D really shines. It is amazingly fast, despite the fact that it's a ray tracer. Through judicious use of adaptive ray tracing, voxels, and numerous other rendering tricks, the renderer rivals or surpasses the speed of many phong renderers. The company's assertion that Cinema 4D is the fastest renderer in its price range is probably correct.

Rendering quality is high. As a ray tracer, Cinema 4D handles reflecting and refracting surfaces exceptionally well. It supports Fresnel transparencies, which change depending on the angle of view, and can turn out some extremely realistic textures. Matte surfaces, however, tend to look plasticy unless lit carefully.

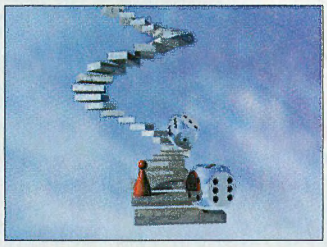


RENDERING IS WHERE CINEMA 4D SHINES. Options include adaptive anti-aliasing with adjustable oversampling, Fresnel transparencies for realistic glass surfaces that vary with the viewing angle, and voxels to enhance rendering speed.

There are numerous lighting effects, including glows, lens flares, and visible lights. Shadows can be either ray-traced for a hard-edged look or shadow-mapped for softer edges. Depth-of-field effects, which add realism to a scene, are also supported.

Cinema 4D redraws screens using its own renderer rather than Apple's QuickDraw 3D. The Gouraud (smooth surface) redraw engine is just as fast as QD3D's, with the added benefit that you can interrupt the redraw—an important advantage on slower Macs.

Animation can be controlled through a VCR-like playback palette with basic keyframe abilities, a timeline, and a graph for velocity control. All of this is standard equipment for a 3D animation program, but Cinema 4D also has a few unique tools. For instance, keyframing is not the only animation option available—objects can also be set to follow a spline path, and keyframes can be copied between objects. Cinema 4D creates timelines for only the types of movement you are creating, saving space and reducing interface clutter.



THIS 480 X 360 FINISHED RENDER, with reflections and refractions turned on and 3 x 3 anti-aliasing oversampling, took only 30 seconds to render on a 200MHz 604e-based Mac.

Cinema 4D includes a fully functional inverse kinematics (IK) engine that's somewhat lacking for character animation. A child object can control a kinematic chain, but a parent object can't. For example, you can't lock a foot to the ground while you move the body, a feature most IK systems now support.

Most of Cinema 4D's modeling power stems from its ability to use mathematical formulas to deform or position an object. All input fields support formulas, and there are several specific tools to do advanced math-based deformation of objects. For the non-mathematically minded, Cinema 4D has a set of standard modeling tools that can accomplish most jobs. Lacking are advanced tools for the creation and adjustment of organic objects—you can't make complex seamless objects and interactively adjust their surfaces.

The most unconventional tool is the Object Manager, which provides an easy way to manipulate object hierarchies and allows object attribute editing, such as smoothing, surface mapping, and IK constraints. Each attribute gets its own double-clickable icon. The tool is potentially a good idea, but the box needs a design overhaul: It wastes valuable screen space by showing more attributes than necessary and uses nondescript icons.

Cinema 4D's unique tools and fast, accurate renderer make it worthwhile for illustrators and animators who don't need the latest organic modeling or character animation abilities. If you need more, wait for Cinema 4D Pro, which promises to include organic modeling, bones, and particle animation. *—Raf Anzovin*

GOOD NEWS: Fast ray-tracing renderer. Path-based animation. Mathematical modeling tools.
BAD NEWS: Modeling tools lack organic abilities. Mediocre documentation.

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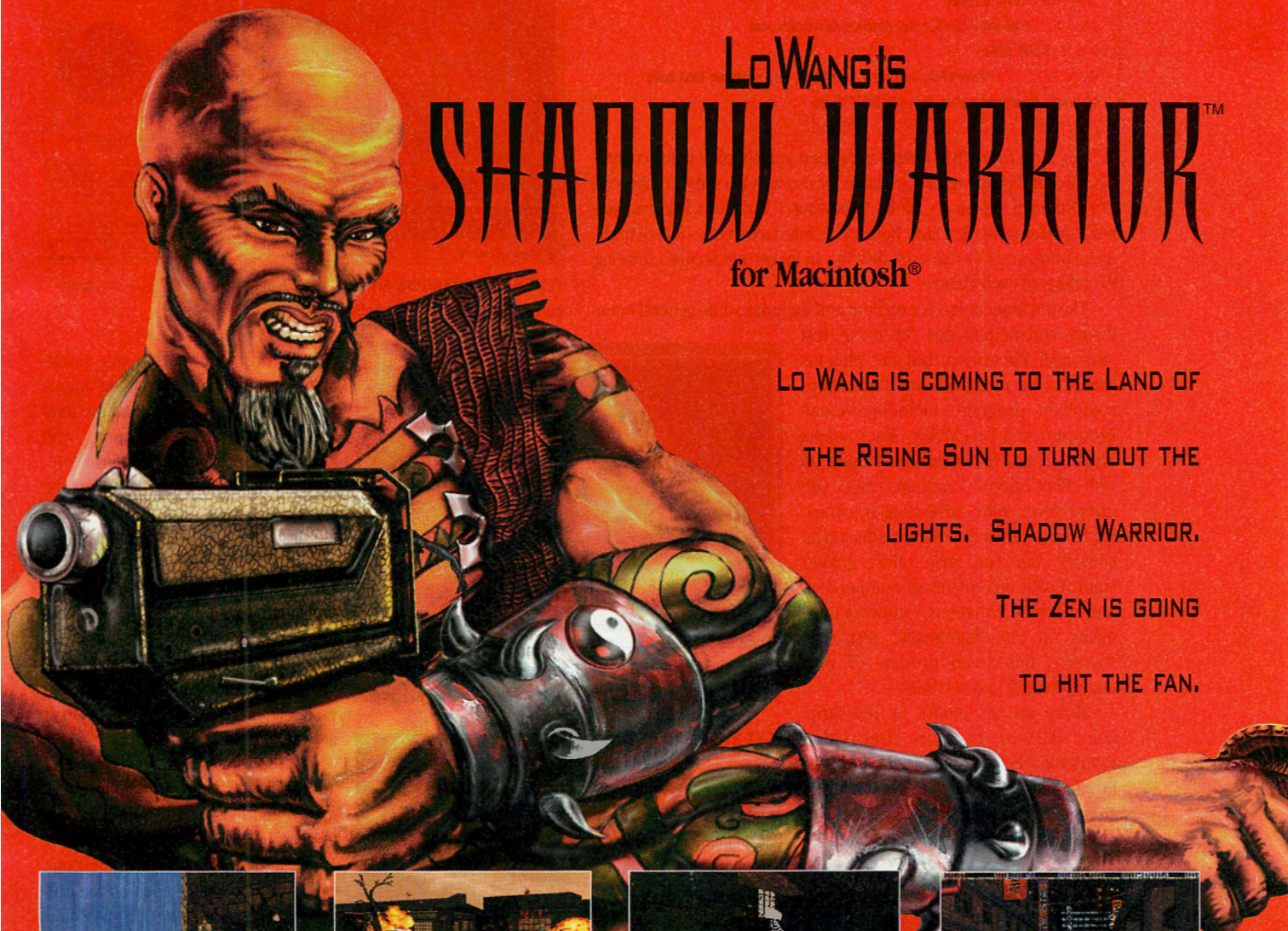

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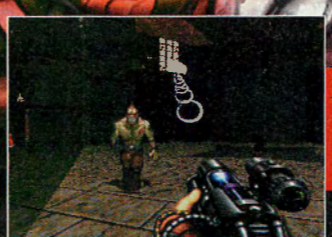

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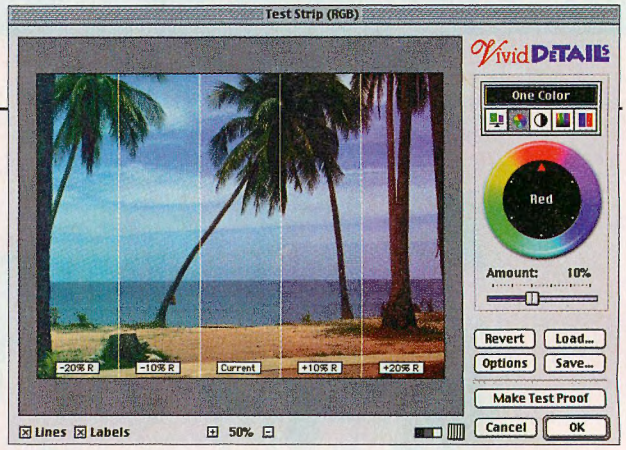
Test Strip 1.1

COMPANY: Vivid Details
CONTACT: 800-948-4843, http://www.vividdetails.com
PRICE: $149 (SRP)
REQUIREMENTS: PowerPC, System 7.1 or later, any program that fully supports Photoshop plug-ins, CD-ROM drive

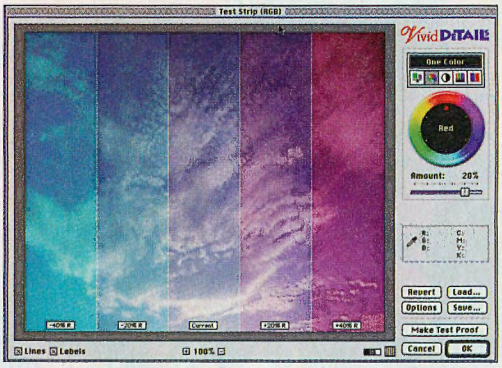


TEST STRIP BORROWS AN OLD TOOL from photography to make color correction and proofing much easier.

Test Strip from Vivid Details is the best and simplest color correction and proofing tool available for use with personal computers. Although similar to Adobe Photoshop's Variations features, you might prefer using Test Strip because its interface mimics that of traditional photography's test strip, dividing an image into sections showing the effects of each change.

The documentation is excellent and includes some general color theory and helpful tips for using Test Strip with Photoshop, but the plug-ins may also be used with any Photoshop-compliant program, including Adobe Illustrator and PageMaker, Macromedia FreeHand, and MetaCreations Painter. As with Photoshop's Variations tool, you can perform color corrections by choosing from a series of different adjustment choices, but Test Strip offers greater control with increments of one percent. And whereas Variations shows adjustments on tiny thumbnails, Test Strip shows a full-screen preview of your image divided into sections.

There are six modes in Test Strip: Color Balance, Exposure, One Color, Saturation, Before and After, and Test Proof. Color Balance mode lets you adjust an image's relative color as well as lightness and darkness. Exposure mode is where brightness and contrast are set.



ADJUSTING THE RED LEVELS in the sky is extremely precise with Test Strip's One Color mode.

One Color mode works with single-color ranges. Saturation mode adjusts an image's printable saturation level and works in conjunction with Photoshop's Gamut Warning tool. Perhaps the most useful feature is the Before and After mode, which shows the original image next to the result of all your corrections combined. The Task List window shows all the corrections that were made. Because you can perform unlimited levels of undo, you can make changes to any adjustment before committing to it. This is much easier than working with Photoshop's adjustment layers.

TEST STRIP CAN PRINT a test proof like this one to any printer. It is important to heed the warning about backing up your source file before creating a test proof.

The Test Proof mode lets you set up an image with a variety of adjustments for printed output. This is a great way to test a printer or create a proof for client approval. However, if you don't save a copy of your image before creating a test proof, your original image is irreversibly converted to the test proof unless you immediately undo. This is one of the few flaws in an excellent program, and Vivid Details plans to correct it in a future update.

Once a correction is complete, it can be saved and used on other images. Saving a Test Strip adjustment compensates for scanner inaccuracies and works much better than using the scanner's software settings or a Photoshop action that allows the same type of adjustment.

Professionals creating digital images for print and anyone who frequently spends time color-correcting images will find Test Strip invaluable. —*Chris Florio*

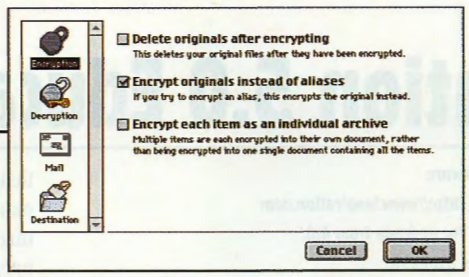
THE COLOR BALANCE MODE set at 15 percent gives a set of variations that are much easier to see than those available in Photoshop.

GOOD NEWS: Excellent documentation. Full-screen previews. Unlimited undos. Test Proof mode prints series of color correction choices.
BAD NEWS: Test Proofs overwrite original images.

reviews

Private File 2.0

COMPANY: Aladdin Systems
CONTACT: 800-480-4011, http://www.aladdinsys.com
PRICE: $49.95 (SRP)
REQUIREMENTS: System 7.0.1 or later, CD-ROM drive



PRIVATE FILE IS SO SIMPLE, several preferences can be toggled using keyboard shortcuts during drag-and-drop.

Anyone looking for no-brainer password protection of sensitive data should consider Private File from Aladdin Systems. Protecting files doesn't get any easier than this.

Private File consists of PF Encrypt and PF Decrypt, two applications so simple to use that the only reason to actually launch them is to change preferences. When you drop an item onto PF Encrypt, you're asked to enter and then verify a case-sensitive password using six to 256 characters (nothing prevents data entry utilities from capturing passwords). First the items are compressed into a StuffIt archive, then encrypted using a combination of industry-standard algorithms called MD5 and RC4. Don't forget your password, because the U.S. version uses 128-bit encryption, which, according to Aladdin, would take 12 million times the age of the universe to crack. Deadline constraints prevented us from verifying this claim.

After encryption, the archive is securely deleted in accordance with Department of Defense standards (you can choose to delete the original file, too). The whole process takes from a few seconds for a small file to several minutes for large folders, resulting in an encrypted file with a "pf" suffix that can be treated just like any other file. Using the Encrypt and Mail feature in the Magic menu, items can be sent easily via popular email programs, but we'd welcome the ability to send a secure message without having to encrypt the text and send it as an attachment. To decrypt, the recipient needs a copy of PF Decrypt, as there's no way to create a self-decrypting archive. Thoughtfully, the CD-ROM contains Mac and Windows 95/NT versions of Private File plus two registration cards, so encrypted files can be legally exchanged cross-platform, even internationally. —*Owen W. Linzmayer*

GOOD NEWS: Simple drag-and-drop interface. Robust security. Cross-platform compatibility.
BAD NEWS: Potential weakness during password entry. Email integration not perfect. No self-decrypting archives.

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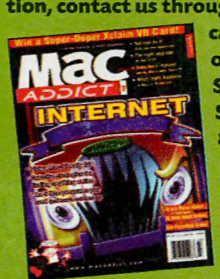

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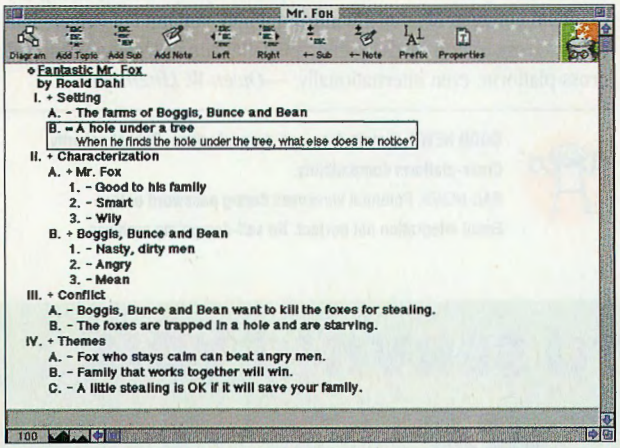
Inspiration 5.0 Education Edition

COMPANY: Inspiration Software
CONTACT: 800-877-4292, http://www.inspiration.com
PRICE: $69 (SRP), $35.95 for upgrade from 4.0, lab packs and site licenses available
REQUIREMENTS: System 6.0.4 or later, 2MB of RAM

Inspiration is a brilliant diagramming and outlining tool for those brainstorming on the fly, diagramming processes, creating concept maps and webs, or simply outlining essays. Two new versions—the Education Edition and the Professional Edition—include expanded customizable symbol libraries; Diagram, Draw, and Outline toolbars that provide rapid access to many of Inspiration's features; and a new template interface that makes creating starter documents easier.



WITH THE CLICK OF A BUTTON in Inspiration's Outline view, you can add topics and subtopics, move them left or right (promote or demote), add or hide notes, and change prefixes or other properties of your outline. Clicking the Diagram button switches you to Diagram view.

Flipping between Diagram and Outline views is simple, and the new toolbars make features more accessible than version 4.0. For instance, the Diagram toolbar includes a New Look button, which sets default attributes for new symbols and links, and a Symbol button, which creates a new symbol linked to the last selected one.

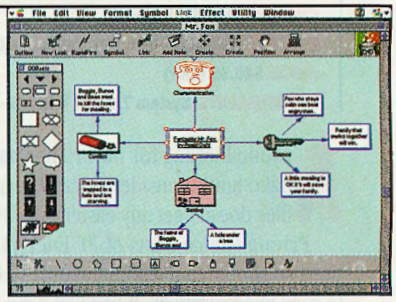


DIAGRAM AND DRAW TOOLBARS make the Diagram view easier to use.

A customizable Symbol palette includes hundreds of symbols that can be dragged and dropped onto documents. Other Diagram tools let you manipulate symbols, links, arrows, labels, notes, and grids. The Draw toolbar provides tools for drawing lines, ovals, polygons, etc. A host of other features enhance the look of documents, including Bézier curves for customizing links; color controls for fills, lines, and text; and text, margin, and header controls for tailoring printed diagrams and outlines.

Inspiration shines for diagrams, but the word processing capabilities are a bit tarnished. For example, its Outline view lacks a ruler, and there's no word count feature. Despite its lean text features, students will take to Inspiration like Yeats to poetry. —*Michael Miley*

GOOD NEWS: New toolbars enhance ease of use. Optimized for Power Macs. Hundreds of customizable symbols.
BAD NEWS: No ruler controls in Outline view. No word count feature. No full-size window persistence for notes.

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Kai's Photo Soap

COMPANY: MetaCreations
CONTACT: 800-472-9025, http://www.metacreations.com
PRICE: $49.95 (SRP)
REQUIREMENTS: PowerPC, System 7.5.5. or later, 16MB of RAM, 20MB of hard disk space, 16-bit color, CD-ROM drive

THE RED-EYE BRUSH wiped out the red eye in the baby's left eye, but don't use that brush on lips.

There's an expanding market for entry-level photo editing tools such as Connectix PhotoMate (see Reviews, Jun/97, p72) and Adobe PhotoDeluxe. Most try to look like baby brothers of Adobe's main man, Photoshop. Not Kai's Photo Soap.

That's not necessarily a bad thing. On launch, Soap takes over the whole screen (and MetaCreations recommends that you quit all other applications), but it's to provide a new metaphor of multiple rooms rather than one desktop. There's a specific workflow: Go from the In Room (where you sort and file photos) to the Prep Room (crop, rotate, and enhance) to the Tone Room (adjust brightness, tone, and contrast) to the Color Room (check hue, saturation, and brightness) to the Detail Room (smooth, sharpen, and fix red eye) to the Finish Room (add backgrounds, edges, and objects). This structure gives the handholding that a beginner may need but can frustrate the more experienced user who wants to mix functions of various rooms.

You use most of Soap's tools as you would a brush or pencil tool—in fact, you use them by "drawing" a tool on your photo with a virtual pencil or brush. There are also erasers in various sizes, in case you've been too zealous. The Heal tool is a standout: It's basically a smudge, but MetaCreations tweaked it so that one swipe takes care of cracks on old scanned photos or facial blemishes. Also, the Red Eye tool does a great job of getting rid of flash-induced red pupils just by wiping it over the subject's eyes.

Soap, however, feels sluggish, even on a Power Mac. Also, the Finish Room, though full of stock backgrounds, offers no way to mask parts of your photo, and text handling is primitive. Still, it can be a fun trip, and if you're a photo novice who wants access to a few powerful tools, Soap can make your photos squeaky clean. *—D. D. Turner*

GOOD NEWS: Some unique and easy-to-use features. Good output.
BAD NEWS: Hegemonic interface. No masking or type handling. Doesn't integrate well with other applications.

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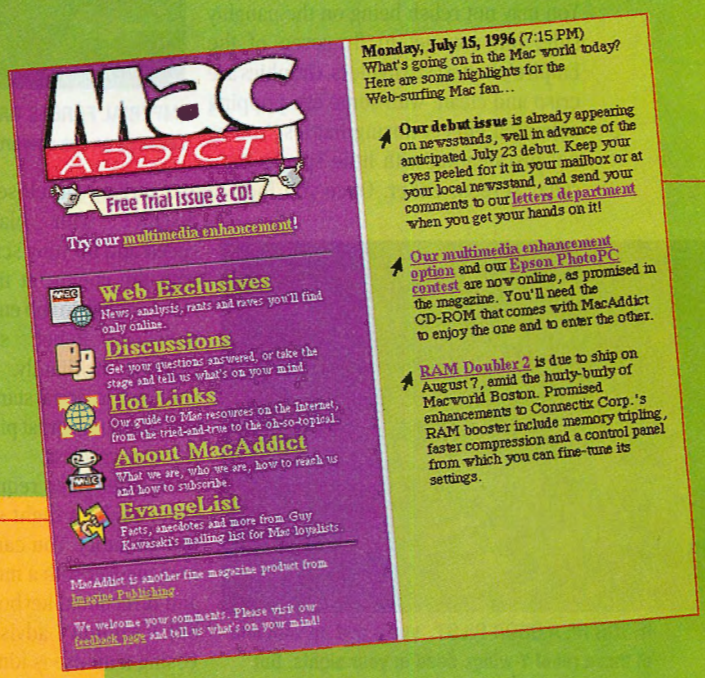

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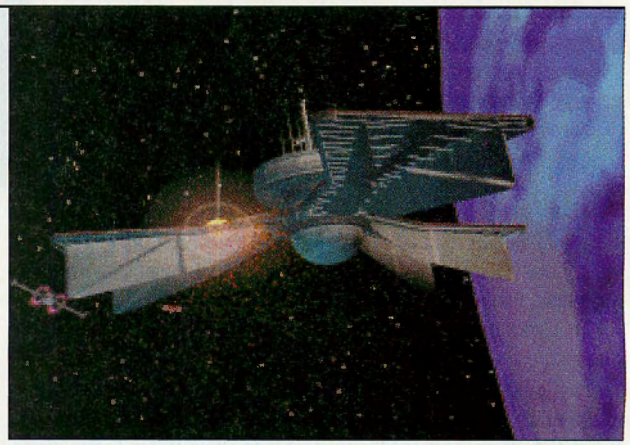
TIE Fighter Collector's CD-ROM

COMPANY: LucasArts Entertainment
CONTACT: 888-532-4263, http://www.lucasarts.com
PRICE: : $29.95 (street)
REQUIREMENTS: Power Mac, 16MB of RAM, 7MB of hard disk space, 2X CD-ROM drive, joystick



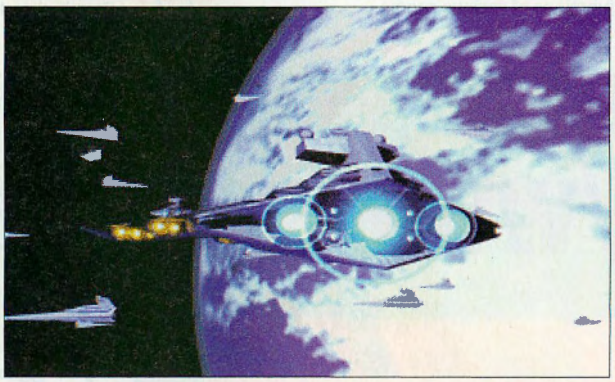
SOME REBEL BASES are sitting ducks. But don't let that stop you. Go ahead—be ruthless.

Come over to the Dark Side, all you Darth Vader fans. LucasArts finally ported the Empire's TIE fighters to the Mac, and now we can join the forces of evil in this latest chapter of the epic *Star Wars* conflict between the Rebel Alliance and the Imperial Navy.

TIE Fighter Collector's CD-ROM, the sequel to 1995's X-Wing, is a strong addition to the growing *Star Wars* gaming edifice. It offers you a chance to be nasty and plants you firmly at the controls of the Evil Empire's deadliest pursuit ship.

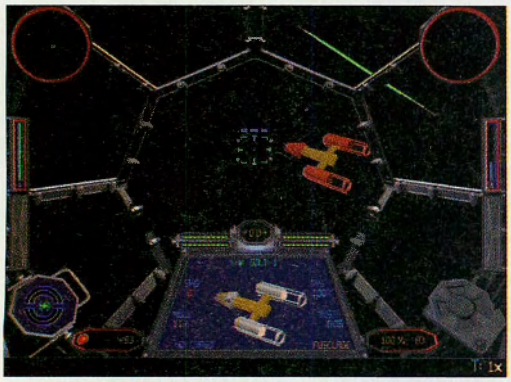
AS YOU HOME IN on a helpless freighter, a rebel fighter cuts you off and dares you to engage.

If you've flown the X-Wing series, you know how the game goes. First you fly through a variety of simulator sessions and training runs, vital if you hope to learn the complex keyboard commands that augment the joystick. Then, as you improve, you'll receive battle assignments. In X-Wing, that puts you on the side of decency. Mess up and a wingman will tell you gently, "Don't worry. You'll do better next time." But if you fail on a TIE mission, a sharp voice is apt to warn, "Abort! Abort! The admiral is very angry."



IMPERIAL FORCES GATHER for a series of counterattacks. It's time for revenge on the cowardly rebels.

Even with all the berating from your superiors, TIE Fighter is more fun. You may not relish being on the naughty side, but you get to fly seven of the Empire's hottest starfighters. Graphics are crisp and clean, with some eye-popping animated effects during battles. You're not just dealing with little specks on a radar screen, either. Once you lock onto a target, you close the distance with blazing speed and fill your screen with the enemy, at times close enough to rub engine nacelles. Rebel ships explode brilliantly, and your own imperial starship can fly apart in great pieces if you're careless.



IF YOU'RE A GOOD PILOT , you'll end up with one of these rebel Y-wings dead in your sights. But don't miss. They fly well, too.

A killer game requires killer tools: A flight stick is mandatory. You can try to maneuver with a mouse and directional keyboard, but I wouldn't advise it. (Using a mouse is kind of like trying to fly to the moon on a Frisbee.) On my Mac, a Motorola StarMax 3000/180 clone, controls were smooth and highly responsive. I tried two different joysticks, an inexpensive CH Products Jetstick and a high-end model from Gravis. Both worked without any noticeable slowdown or breakup. I've got to admit, the cheaper Jetstick did just as well as the Gravis on TIE Fighter. Regardless of the joystick you use, you'll need one hand free to manipulate the many keyboard controls, from combat systems and shields to in-flight communications.

There's even a story of sorts: revenge for the cowardly rebel attack on the Death Star, with cut scenes to keep the game moving. You'll get some 5,000 lines of recorded dialogue, oily inducements from the emperor, and loads of medals as you work your way up the combat ladder. Mac players get 104 well-designed missions, 22 more than in the PC version. Plus memorable *Star Wars* music, using LucasArts' exclusive Interactive Music and Sound Effects system, which adjusts quickly in response to player choices.

If you're a *Star Wars* fan, this game is a must. Even if you aren't, TIE Fighter is a heck of a lot of fun. Just don't get caught helping any little old ladies across the street. The imperial admiral might get very angry. —*John Lee*

GOOD NEWS: Impressive graphics. Good learning curve. Interactive music. Enough fast action to keep anyone playing for months.
BAD NEWS: Complex keyboard commands to augment joystick. Go through countless training exercises or you're doomed to fail.

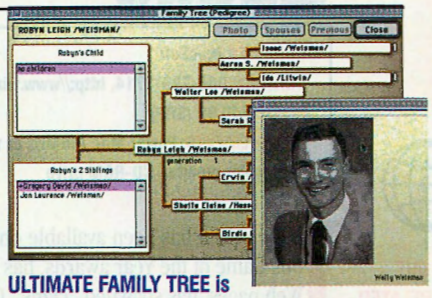
Ultimate Family Tree Deluxe 1.0

DEVELOPER: Palladium Interactive
CONTACT: 800-910-2696, http://www.palladiumnet.com
PRICE: $59.99 (SRP)
REQUIREMENTS: 68040 or faster, System 7.0.1 or later, 8MB of RAM (16MB recommended), 45MB of hard disk space, 2X CD-ROM drive, word processor capable of importing Rich Text Format (RTF) files

Staring at a shoe box stuffed with fading photos and dogeared documents, the task of compiling your family's history may seem daunting, but Ultimate Family Tree promises to guide you through every step. Unfortunately, the promise is largely unkept.

The basic package lists for $20 and introduces you to genealogy fundamentals for creating customized family logs that can be printed or uploaded to the Web. If you have huge gaps in your history, Family Tracer provides access to databases at http://www.uftree.com, along with the ability to view other users' sites.

The deluxe version offers myriad options designed to turn your family portrait into your own TV miniseries, if you're ambitious. The Family Tutor offers a multimedia walkthrough on locating and analyzing genealogical information. The Social Security Death Index contains more than 54 million records from the 1920s to 1996. The Family Album Maker promises to design colorful, innovative photo albums from your photos and images. And the Records Requester has information on every address, phone number, and fee amount required to obtain records.



ULTIMATE FAMILY TREE is fine for building basic pedigrees, but its multimedia features (see poorly dithered photo, inset) are far behind the Mac's capabilities.

Though great in concept, the program feels like a Windows port and is unbearably slow. Furthermore, imported images look wretched due to dithering. Worse, importing photos or documents larger than 75KB is impossible. Until Palladium releases an update that utilizes the Mac's user interface and graphics capabilities, we'll do the work ourselves, thanks. —*Robyn Weisman*

GOOD NEWS: Fast searches of unopened documents. Immediately displays search results.
BAD NEWS: Doesn't entirely eliminate need for Find File.

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XLR8 MACh Speed 200				485	
XLR8 MACh Speed 180			367		

FPU Test

	200	300	400	500	600
Power Mac 8500/150	276				
XLR8 MACh Speed 233				501	
XLR8 MACh Speed 225				447	
XLR8 MACh Speed 200				405	
XLR8 MACh Speed 180				400	

MacBench 4.0 results using Power Mac 8500, 16 MB RAM, on board SCSI, no hardware disk cache, 512K disk cache, running System 7.6. All products used in this test were shipping versions available to the public. All tests were performed by the XLR8 division of Interex. Ziff-Davis makes no representations or warranties as to the results of this test.

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Quake

COMPANY: MacSoft
CONTACT: 800-229-2714, http://www.wizworks.com/macsoft
PRICE: $49.99 (SRP)
REQUIREMENTS: Power Mac (80MHz or faster recommended), 16MB of free RAM, color monitor, CD-ROM drive

HERE IT COMES: That big white thing is a Shambler. It will throw lightning from afar, then jump at you and claw away. Note the light and shadows.

CHECK OUT THESE RELATED SITES: http://www.planetquake.com, http://www.curtin.edu.au/~scott/macquake.

In the year it has been available on the PC, Quake has won numerous Game of the Year awards, has become the subject of countless Web pages, has spawned "clans" (teams devoted to Internet play), and ruined many, many lives. And now it's here for the Mac.

Quake offers a leap in gaming technology. Everything is real 3D—unlike in Marathon where 2D sprite-based characters exist in a "2½D" world. The environment has real height attributes, so you can have true bridges, rooms over rooms, and real-time shadows. Characters are polygonal models with texture-mapped "skins." Weapons follow real physical dynamics, so grenades hop, skip, and bounce around corners; rockets, if poorly aimed, come back down after they've gone up.

No doubt, this is the best first-person game engine out there. And it makes a difference in gameplay. At first, Marathon players may see the dull color palettes, the less-than-logical design, and the lack of plot, and shrug. But once they take a full 90-degree look up or down, or run through a twisting maze with real, flickering shadows, doubts will vanish.

Quake is immersive, if not as amusing or interactive as Duke Nukem 3D. The game runs at a smooth 30-plus frames per second (fps) on a 200MHz 604e Power Mac (at an acceptable 320-x-240-pixel resolution with pixel doubling), and 20-plus fps on a Mac with a 200MHz 603e PowerPC. Pushing the resolution to a nondoubled 640 x 480 pixels yields sharper images but slows things considerably. You can, however, turn down details, skip every other line, disable flickering flames, and lower resolution.

As for gameplay, Quake doesn't add much to the first-person, shoot-the-monsters, find-the-keys formula. It simply does it better than anyone else. Solo play, admittedly, lacks long-term appeal and replayability. However, for local network or even Net games (something Marathon could never do), Quake is king. Just ask the players here—oh no, you can't, because we're all busy fragging each other.

Next to network play, the best thing about Quake is its extensibility. You can use custom maps and with QuakeC, Quake's object-oriented programming language, you can create new weapons, creatures, physics models, and even behaviors. For example, not only can you make a Hell Knight faster or slower, you can make it fight on your side, ignore all but certain monsters, or just jump up and down. Scour the Web, and you'll find everything from grappling hook "mods" to Cujo, a giant dog that accompanies you on your adventure. Test carefully and have patience, though—many mods and Total Conversions (TCs) may not work with the Mac version.

Also note that in conjunction with a special patched version of Quake, the Power3D PCI card from TechWorks (800-883-6495; http://www.techworks.com) lets you run Quake at a full-screen 640 x 480 pixels at more than 30 fps. It gives you smoother textures, fog and translucency effects, enhanced lighting effects (grenades don't just flash but light a dark corridor), and more. Be warned: Since this card accelerates full-screen 3D only, you can only use it with programs that take over the whole screen—in other words, games. Also, you'll need at least an extra 16MB of RAM when using the card.

Yes, Quake is still a first-person, dungeon-crawling, plot-free shoot-'em-up. But it offers up a whole new level of 3D realism that no other shooter-up does and the innumerable and clever mods and TCs for Quake are fascinating. Besides, sometimes it's just fun to run around, blowing the giblets out of your friends. —*D. D. Turner*

Tips

CHEATS, OF COURSE

To enable any cheat or code, you first must start a game, then hit the tilde (~) key. This brings down the Console. Type your code at the prompt.

GOD: God mode. You're invulnerable.
IMPULSE 9: You get all available weapons and ammo.
IMPULSE 255: Your weapons deal out quadruple damage.
FLY: You can fly with the jump key, or "swim" up and down in the air.
GIVE H (number): Gives you (number) amounts of health.

JOIN THE PARTY: With a few modifications, you can make grunts in Quake look like anything. Hey, is that Boba Fett in the corner?

GOOD NEWS: True 3D environment. Blazing network play. Extensible in interesting ways. Takes advantage of hardware acceleration.
BAD NEWS: No plot means it's only a run-and-gun in solo play.

IT THINKS. THEREFORE IT KILLS.

Fully 3-D rendered graphics, killer gameplay like you've never seen before, advanced artificial enemy intelligence, and the revolutionary sniper mode. See for yourself why MDK sets the new standard for action gaming.

- Features the revolutionary sniper mode that allows you to zoom in and pick your enemy off with astonishing accuracy.
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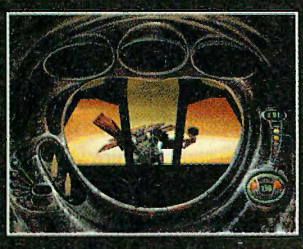
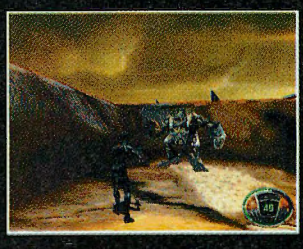
COMING TO MAC THIS FALL.

Actual MAC Screen Shots.

http://www.playmatestoys.com

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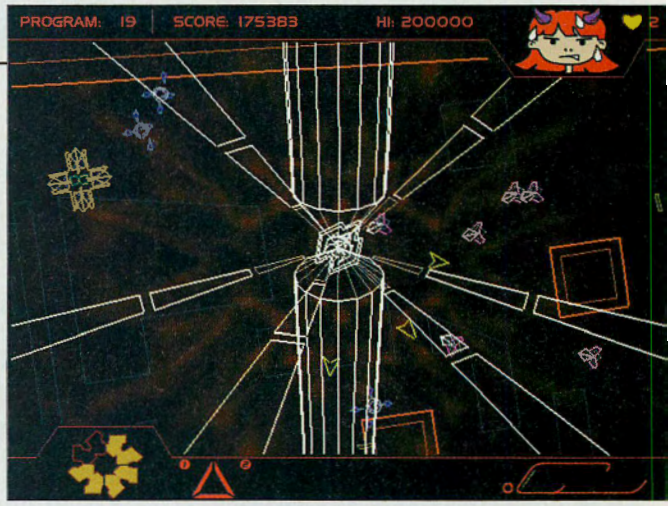
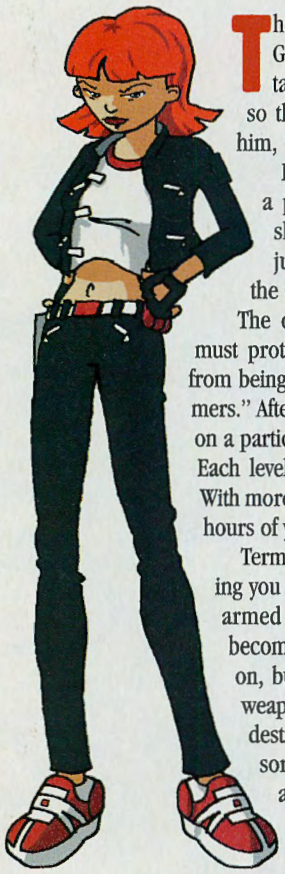
Battle-Girl

COMPANY: Ultra/United Games
CONTACT: 804-359-1773, http://www.ultra-united.com
PRICE: $25 (direct)
REQUIREMENTS: PowerPC, System 7.5.2 or later, 5MB of RAM, 256 colors at 640 x 480 or better, CD-ROM drive



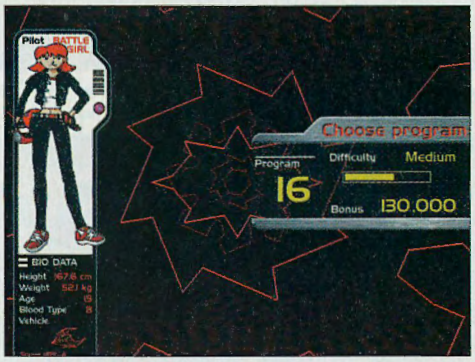
OH NO! BATTLE-GIRL'S SHIP took one too many hits. Chalk one up for Terminus.



The evil robot Terminus has managed to get inside the Great Machine, the computer responsible for maintaining order in the universe. He intends to destroy it so that Chaos will reign supreme. Someone has to stop him, don't they?

Enter Battle-Girl, a 15-year-old red-headed pilot with a penchant for combat. Resurrected from her sleep, she's ready to make Terminus pay for his actions. She jumps into her Soyuz 1183-A BattleCraft and heads for the Great Machine.

The object is simple but not easy. You must protect the chips inside the computer from being subverted by Terminus' "programmers." After you destroy enough programmers on a particular level, you proceed to the next. Each level, of course, increases in difficulty. With more than 99 levels, you can waste many hours of your life.



GET SOME BIO DATA on Battle-Girl, choose the level of difficulty, and off you go.

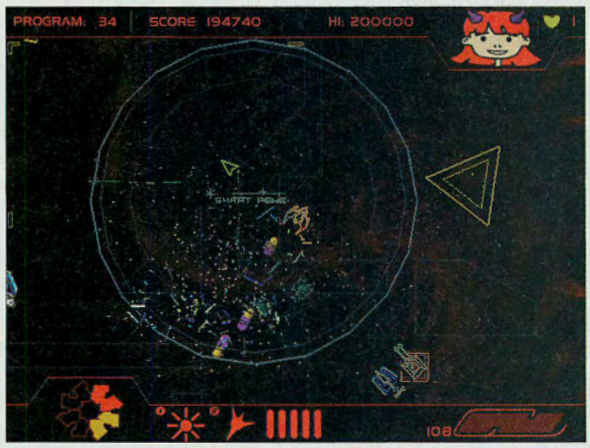
Terminus, meanwhile, is not idly watching you kill off his programmers. He sends armed escorts to protect them. They become meaner and nastier as time goes on, but you acquire meaner and nastier weapons to use against them. When you destroy an escort, you usually get some sort of power-up, such as a restoration of health, shields, and special weapons.

If the programmers manage to subvert four of the chips (called "pods") on a level, then Terminus is free to enter the level and attack you personally. You don't want to let this happen. He is very difficult to destroy, and you most likely will not survive the encounter. Should you be lucky enough to do it, you get big bonus points, but he comes right back on the next level anyway.

This game is pure action satisfaction. The 2D vector-based graphics are extremely well done, providing smooth, intense gameplay. It hearkens back to the arcade games of yesteryear but adds some new features to take advantage of modern hardware and software advances.

For example, you can adjust the game screen to fit the full resolution of your monitor. This means you can fill a 17- or 20-inch monitor and see almost all of the game field at once. You can use a variety of input devices: keyboard, joystick, mouse, or any combination of the three for control. You can even control the detail level of the graphics, so slower machines will perform more acceptably.

The introduction and setup controls and appearance are equally masterful, making for a well-rounded game experience. The icing on the cake is the excellent techno soundtrack, pounding along with the incessant game action and keeping you pumped up and ready for more. You can even play the CD in any music CD player, so you can enjoy your favorite Battle-Girl score even when you're not playing the game. For the ultimate Battle-Girl experience, we recommend connecting a pair of external subwoofers to your Mac and turning them all the way up. —*Wade Albright*



BATTLE-GIRL TAKES OUT numerous enemies at once with a well-executed smart bomb.

GOOD NEWS: Awesome arcade action, nice graphics, good plot, great soundtrack.
BAD NEWS: At some point, you may have to stop playing and go back to real life.

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System Requirements: Any 68030 or higher Macintosh with at least 8MB RAM, color monitor and CD-ROM drive. Also accelerated for Power Macintosh.

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ENCYCLOPEDIA OF NATURE 2.0 ■ HANDS-ON POWERBOATING ■ STAR WARPED ■ WILD AFRICA, VOLUME 2 ■ INTERACTIVE EARTH

Sometimes you just want to go back—maybe back to nature, back to a classic movie, back to Apple before Bill Gates.... Ah, life, it don't let you. But for less than the cost of a couple of shares of Apple stock, some CDs just might do the trick. Read on to find out which discs capture those old feelings and which ones just make you grow old with frustration. —*Joe Mahr*

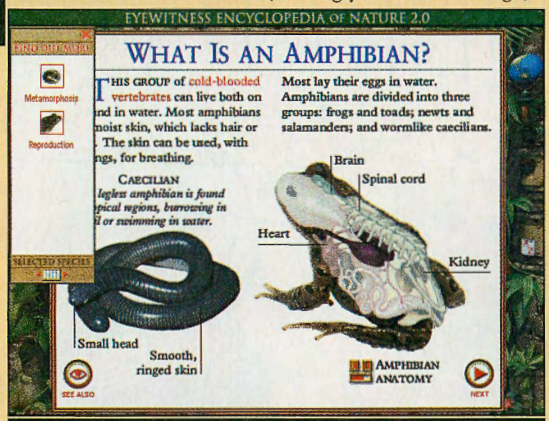
Eyewitness Encyclopedia of Nature 2.0

COMPANY: DK Multimedia
CONTACT: 800-DKMM-575, http://www.dk.com
PRICE: $39.95 (SRP)
REQUIREMENTS: 68040 or faster, System 7.0 or later, 12MB of RAM, 256-color monitor, CD-ROM drive (2X CD-ROM recommended)

From your safe perch above the jungle, pan down to a poisonous frog and click away for a description and other options on amphibians. Or move to a Midwestern marsh, or an English forest, for a picturesque glimpse at all sorts of critters.

It's DK's latest stab at categorizing every living thing, and this one has all the usual fixin's: beautiful scenery, easy navigation, and lots of links. Laid out in eight categories is everything considered alive, from falcons to fungi. Wander around habitats or check out prehistoric life. New on this disc: the views seen by some animals, compared with those of humans.

But with only a few animals, the vision activity isn't taken far enough. For that matter, the rest of the disc doesn't climb above the basics. And there's no Back button, leaving you like a yippity dog on linoleum, wanting to change direction but hitting the wall anyway.



THE WILD AND WOOLLY woven into predictably pretty package.

The Last Words:

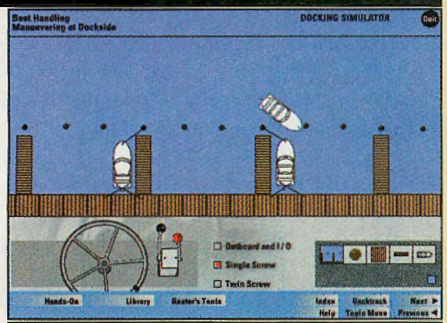
Mark: The production values here are nice enough, the graphics polished, and there's a reasonable amount of information (though it's not as in-depth as I would like). But I've seen this kind of thing so many times now that I can't get excited anymore.

Judy: DK has its design down: sturdy, colorful, predictable. The world through the eyes of a hare, a piranha, and a ladybug is neat.

Joe: With rich graphics and quick links, this CD is among the best of the gazillions of animal CDs out there. But, once a colorful disc comes along with a lot of details, this disc will sink to algae level.

Hands-On Powerboating

COMPANY: Response Ability Marketing
CONTACT: 888-677-1790, http://www.chapmancd.com
PRICE: $79.95 (SRP)
REQUIREMENTS: PowerPC, System 7.1 or later, 12MB of RAM, 256-color monitor, 2X CD-ROM drive



MAN OVERBORED! Lots of learning but little action.

Ahoy all *MacAddict* powerboaters! Yes, you masses, there is finally a CD for you. That is, so long as you don't want to drive the boat.

The inquisitive powerboater can study lots of boating tips, including the full-text of the boating book *Chapman Piloting, Seamanship & Small Boat Handling* and all the rules of navigation. Let this title from the Chapman Piloting Interactive Series teach you to chart your own trip, or take in some videos or animations on performing certain maneuvers and steering through bad weather. It's a great learning aid.

But this isn't boat drivers' ed. The only time you're behind the wheel is for a practice docking session. And even then your vessel is just a boat blip on the screen to be maneuvered—very slowly—around other boat blips. Unless you're still saving to buy Pong, your interest will sink fast.

The Last Words:

Mark: I'd say the heavy use of helpful animation is enough to make this an improvement over a reference book, but it's still pretty dull stuff.

Judy: This disc is a surprise. There's everything from basic boating techniques and terms to QuickTime movie scenarios to hands-on practice maneuvering and charting, and rules of the road. Motor on, dude.

Joe: Maybe if 66.6 percent of the title didn't imply hands-on, I'd be more inclined to cut this disc some slack. But nah. Loads of seaworthy information is no comparison to driving the boat. Vroom. Vroom. This sputtered.

Star Warped

COMPANY: Parroty Interactive
CONTACT: 800-910-2696, http://www.parroty.com
PRICE: $19.95 (SRP)
REQUIREMENTS: 68030 or faster, System 7.1 or later, 8MB of RAM, 256-color monitor, 2X CD-ROM drive

Remember those two guys from high school who worshiped *Star Wars*? Meet two more just like 'em—with the same bad jokes and so-so games that left them ostracized from society in the first place.

Fictional loser stepbrothers Brian and Aaron host the CD, which is filled with spoof trivia and a handful of games such as Death Star Destructo. You can splice the genes of your favorite characters or see what movie scenes would have been like if another famous person had directed them. Sounds as enchanting as a date with Princess Leia.

Instead, you get Chewy. Sub-shareware-level games and the lame one-liners can turn the peppiest ewok into a grumpy Darth grabbing for the nearest light saber to silence those punks.

STAR WARPED? Nah, bad jokes make it plain warped.

The Last Words:

Mark: I have enough *Star Wars* trivia knowledge to get all the jokes, but I wasn't laughing a whole lot. If you're not well versed in *Star Wars* lore, don't even think about it.

Judy: One word for the concept: cool. One word for the execution: adolescent. The nerd factor combined with my system hanging for minutes and minutes and minutes at a time was entirely frustrating. Ugh.

Joe: I love a good parody, but this became a parody of a parody. The bad jokes and contrived games seemed so thrown together, like something two *Star Wars*-lovin' stepbrothers would do. Too bad that's exactly the last thing that would entertain me.

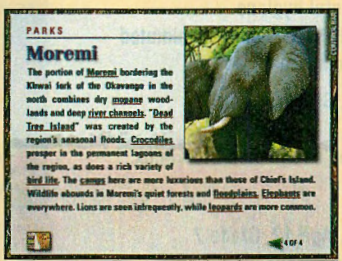
Wild Africa, Volume 2: Okavango, Chobe, Makgadikgadi

COMPANY: Sumeria
CONTACT: 415-904-0800, http://www.sumeria.com
PRICE: $49.95 (SRP)
REQUIREMENTS: 68040 or faster, System 7.0 or later, 8MB of RAM, 16-bit color, 4X CD-ROM drive

This CD safari offers all the info, insight, and inspiration you'll need for a jaunt to Africa—but not the money.

Disc travelers find plenty of flicks and pics of lions and the like during a tour of six areas. Export anything with ease, or create your own slide show from hundreds of images. Word herders can drink from the bountiful articles on the land and the living, although a lean animal encyclopedia may leave some tourists parched. (Wild Africa, Volume 1 had a larger animal list, but much less travel and geographic info.)

Clicks bring up maps to public parks in Botswana and Zimbabwe along with tons of usable advice for do-it-yourselfers, such as whom to trust and what to take. Tour-types can scan a list of guides for an African trip—limited only by the lack of services in the area.



SAFARI HARDY with cunning interface and roaring info.

The Last Words:

Mark: Although the video footage and the gorgeous photos are top-notch, and the travel information is comprehensive, the rest of the disc is still a bit sketchy—particularly the wildlife info.

Judy: I'd buy it. I'd study the Travel and Reference sections and plan on making it to Africa before my time on this little earth is over.

Joe: Those who'll never make it to Canada, let alone Africa, can travel in style with a simple interface. And the articles are folksy enough to be readable but not campy. All in all, a good trip.

Interactive Earth

COMPANY: WorldLink Media
CONTACT: 415-931-6952
PRICE: $49.95 (direct)
REQUIREMENTS: 68030 or faster, 5MB of free RAM, 5MB of available hard disk space, 256-color monitor, 2X CD-ROM drive

Graph the earth's population density in relation to its rivers. Or, from your spy satellite in space, zoom in on the Siberian tundra or, maybe, Toledo. Just don't expect to see city streets or consistent labeling.

The disc makers meshed the thousands of pictures shot from space and scientific data to produce a database on the health of Mom Earth. There are dozens of variables, from coal deposits to cloud cover, that can be overlaid to put the studious or curious in their own little worlds. For QuickTime lovers, there are mini documentaries on subjects such as the ozone layer and deforestation. Better yet, take the Space Shuttle guided tour around Earth, narrated by an astronaut.

Touring the disc, however, gets pretty rough. There's no Back button, a real handicap on a CD designed for meandering. Also, you can zoom in on only certain places, and even then, most cities are still dots. Of course, if you really want to see a city close up, buy a map.

A WORLD OF EARTH PHOTOS and facts overcome small-world navigation.

The Last Words:

Mark: Incredibly cool. The catalogs of satellite photos and maps are all well and good, but the World view and its array of overlays are truly fantastic.

Judy: Though the images are literally out of this world, the human, real-world navigation leaves something to be desired.

Joe: It just didn't do it for me. You can't even get as close as what it looks like from a 737. So, other than pretty pictures and some neat overlays, what's the point?

Kidz Stuff

Local Mac addicts from the Brisbane schools work hard and play hard with kids' software.

Connie and Bonnie's Birthday BlastOff

COMPANY: Active Arts
CONTACT: 800-980-9468, http://www.active-arts.com
PRICE: $29.95 (street)
REQUIREMENTS: 40MHz 68040 or faster, System 7.1 or later, 16MB of RAM, 2X CD-ROM drive

For their birthday, twins Connie and Bonnie ask for the moon but get the Milky Way in what turns out to be a wildly educational space adventure. Clickables come alive with out-of-this-world facts as the birthday girls and their pet poodle get in touch with the galaxy on their tour of the stars' home. Smart students who pay attention along the way can access dozens of project ideas for their next science fair. Or they can stop the ride, head over to the art studio, and produce their own space-age artwork.

GOOD FOR GRADES: 2 to 5

LIKES: "You can paint pictures about the characters. You can learn real space facts. You can make pictures on your own about space." ▪Rockson

"It has lots of things to do, from drawing to doing experiments." ▪Benjamin

"I liked the graphics. I also liked Jeff, the dog." ▪Emily

DISLIKES: "It didn't give enough directions." ▪Lena

"None." ▪Brooks

SOUND ADVICE: "Give it more experiments." ▪Benjamin

FINAL REPORT: Connie and Bonnie are a scientifically proven blast.

FIND DEMOS of Connie and Bonnie's Birthday BlastOff and InventorLabs: Transportation on The Disc.

Meet the players...

AMANDA OLSEN, Age 10, Grade 5
EXPERTISE: Dental hygiene
PICK OF THE MONTH: Disney's Animated StoryBook, Hercules

JEREMIE ROBISON, Age 11, Grade 6
EXPERTISE: Italian opera
PICK OF THE MONTH: Disney's Animated StoryBook, Hercules

ROCKSON YAN, Age 12, Grade 7
EXPERTISE: Worm collecting
PICK OF THE MONTH: Wishbone Print Tricks

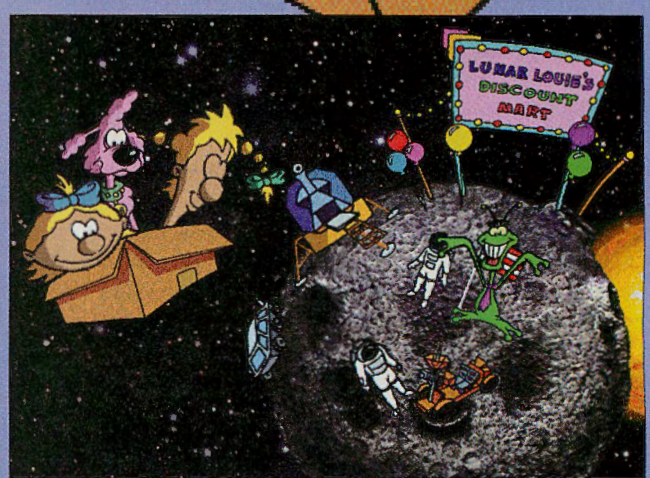
BROOKS WILSON, Age 14, Grade 8
EXPERTISE: Daydreaming
PICK OF THE MONTH: Disney's Animated StoryBook, Hercules

PAUL JIMENEZ, Age 11, Grade 6
EXPERTISE: Smiling
PICK OF THE MONTH: Disney's Animated StoryBook, Hercules

BENJAMIN WILSON, Age 11, Grade 6
EXPERTISE: Russian ballet
PICK OF THE MONTH: Wishbone Print Tricks

LENA RUDOLPH, Age 11, Grade 7
EXPERTISE: Pro bowling
PICK OF THE MONTH: Disney's Animated StoryBook, Hercules

EMILY HANDA, Age 10, Grade 6
EXPERTISE: Cave decorating
PICK OF THE MONTH: Disney's Animated StoryBook, Hercules



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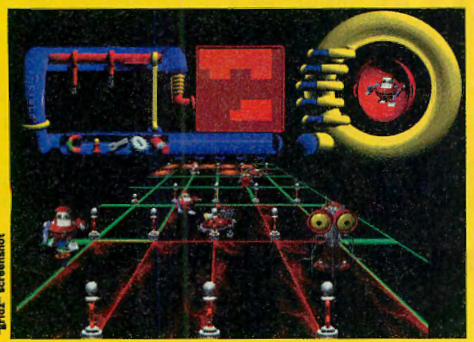
"gridz" screenshot

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InventorLabs: Transportation

COMPANY: Houghton Mifflin Interactive
CONTACT: 800-829-7962, http://www.hminet.com
PRICE: $29.95 (SRP)
REQUIREMENTS: System 7.1 or later, 68040 or faster, 8MB of RAM, 2X CD-ROM drive

Young inventors running low on inspiration can now fuel up at the labs of some of the world's biggest thinkers. In this pursuit of history, you'll wander around the Wright Brothers' workshops; hang out with the father of the railroad, George Stephenson; and take a spin in the very first Mercedes. In addition to this peek at the past, the title also gives you a glimpse of future space taxis and electric cars. While you're peering ahead, you'll want to enter the road race, which lets you invent your own futuristic vehicle and design race courses to test out your new ride.

LEAN LABS cut back on inventions and fall short on fun.

GOOD FOR GRADES: 4 to 8

LIKES: "I like to make the remote control car. I also like to study the inventions." ▪**Paul**

"It's cool making your own car and then racing it on the track. It is also neat looking at other cars and stuff." ▪**Benjamin**

"It was very informative." ▪**Brooks**

DISLIKES: "There weren't enough options. I lost my interest about 15 minutes into the program." ▪**Jeremie**

"I did not like that they gave you barely any instructions. I did not like that it took so long to get into things." ▪**Amanda**

SOUND ADVICE: "It needs to be easier to understand." ▪**Brooks**

FINAL REPORT: Tough transport title offers limited mileage and poor directions.

Pajama Sam's SockWorks

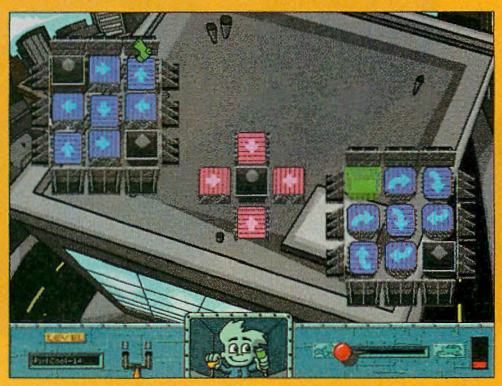
COMPANY: Humongous Entertainment
CONTACT: 800-499-8386, http://www.humongous.com
PRICE: $14.95 (street)
REQUIREMENTS: 68040 or faster, System 7.0 or later, 8MB of RAM, 2X CD-ROM drive

Armed with a high-powered Sock-O-Matic Mark III, Pajama Sam sets out to make chores fun with dozens of arcade-style games that you'll need to play to get your freshly laundered foot warmers paired, folded, and put away. A ton of skill levels and customizable game boards means the challenges are always new, and hardly easy. Play the games at a crawl until you get the hang of them, then take off at a fast and furious pace matching colors, switching gears, and changing directions to get your socks from the hamper to your dresser drawer.

GOOD FOR GRADES: 1 to 4

LIKES: "You have to use your brain to do some of the levels. Plus it's fun putting the socks in the right places." ▪**Benjamin**

"If I was a little kid, I would like it a lot, and even now I like it. My friends like it, too. It's easy enough for kids to figure out. The more levels you get to, the better it gets." ▪**Lena**


PAJAMA SAM socks it to 'em in this clean-cut arcade.

DISLIKES: "I did not like how when you wanted it to go faster, only the music went faster." ▪**Paul**

"The sound is annoying, and it is the same each time." ▪**Benjamin**

SOUND ADVICE: "Make it harder." ▪**Brooks**

FINAL REPORT: Pajama Sam can make even laundry exciting.

Wishbone Print Tricks

COMPANY: Palladium Interactive
CONTACT: 800-910-2696, http://www.palladium.net
PRICE: $19.99 (street)
REQUIREMENTS: 68040 or faster, System 7.1 or later, 8MB of RAM 2X CD-ROM drive

Word-loving Wishbone leads you through an evolution of printing that starts with wooden blocks and winds up with this very CD-ROM in his attempt to explain that the printing industry is the wishbone, er, backbone of the way we communicate. But after class is out, it's time to get really creative. Kids can use Wishbone in his various literary guises to decorate bookmarks, greeting cards, notepaper, and more. A link to Wishbone's Web site allows for even more images of the time-traveling puppy.

CLEVER CANINE teaches kids new printing tricks. Good dog.

GOOD FOR GRADES: 1 to 6

LIKES: "It has great sound, and it's fun making cards, and his words are funny." ▪**Benjamin**

"I liked making the cards and bookmarks." ▪**Paul**

"If you like Wishbone, you'll like this for sure." ▪**Lena**

"I liked that it was easy and fun." ▪**Brooks**

DISLIKES: "It ran kind of slow in the beginning." ▪**Rockson**

"You had to click three to five times to open an icon." ▪**Jeremie**

SOUND ADVICE: "Make it faster." ▪**Emily**

FINAL REPORT: Trendy terrier has a talent for design.

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Reader Rabbit's Preschool

COMPANY: The Learning Company
CONTACT: 800-227-5609, http://www.learningco.com
PRICE: $29.95 (street)
REQUIREMENTS: 68040 or faster, System 7.0.1 or later, 8MB of RAM, 2X CD-ROM drive

CUTE ANIMAL CHARACTERS teach preschoolers basic skills.

Reader Rabbit and Mat the Mouse take charge in this spunky preschool prep program in which the duo must scare up keys to unlock The Wonder Pony and ride the magic carousel. You'll earn keys by playing four different games that teach basic math, shapes, colors, and listening skills. Play hide and seek to learn counting forward and backward, visit the diner to whip up some banana-fish-corn casserole and become acquainted with the alphabet, or join the Pattern Parade to learn logic. There are four different skill levels, so as you get smarter, the games get harder.

GOOD FOR GRADES: Preschool

LIKES: "If I was a little kid, I would like it and learn a lot from it." ▪**Lena**
"It has lots of learning games and brainteasers." ▪**Benjamin**
"I liked the games, especially the monkey." ▪**Emily**

DISLIKES: "I could not hear anything they said." ▪**Paul**
"It had too much talk and was a tad bit annoying." ▪**Jeremie**

SOUND ADVICE: "Make it run a little bit faster." ▪**Rockson**

FINAL REPORT: Reader Rabbit gets the nod for preschoolers.

Reader Rabbit's Kindergarten

COMPANY: The Learning Company
CONTACT: 800-227-5609, http://www.learningco.com
PRICE: $29.95 (street)
REQUIREMENTS: 68040 or faster, System 7.0.1 or later, 8MB of RAM, 2X CD-ROM drive

Prickly porcupine Spike has stolen the party supplies for tonight's big bash at Camp Happy Trails, and it's up to you to track them down. As part of your search, you'll stop by the diner to learn shapes, sizes, and cooking; work out at Number Lumber with addition and subtraction puzzles; and repair and build bridges to make your way around the campgrounds. Find all the stolen objects and get ready to party down with your forest friends.

GOOD FOR GRADES: Kindergarten

LIKES: "It has lots of brain games and stuff to learn about. The sound and colors are great, too." ▪**Benjamin**
"It has good math skills for kids to learn. This is a fun program for kids to learn their art and math." ▪**Rockson**

KIDS TEST THEIR WITS in a lively campground hunt for stolen party goods.

DISLIKES: "I did not like how slow it was." ▪**Paul**
"Sometimes it was annoying." ▪**Emily**

SOUND ADVICE: "Make it a little faster." ▪**Lena**

FINAL REPORT: Slow-paced sleuth still brings home the loot.

Disney's Animated StoryBook, Hercules

COMPANY: Disney Interactive
CONTACT: 800-900-9234, http://www.disneyinteractive.com
PRICE: $34.99 (SRP)
REQUIREMENTS: 68040 or faster, System 7.1 or later, 8MB of RAM, 2X CD-ROM drive

Fire up Hercules' sing-along storybook, and you'll find yourself side-by-side with the strongman as he rescues the gods from Hades, vanquishes dragons, and navigates mazes crawling with monsters. You'll strengthen your problem-solving skills, muscle up your memory, and bone up on vocabulary through tricky puzzles, battles, and poetry readings. Hobnobbing with a hero of such mythic proportions also introduces you to more Greek mythology than could fit into one Coliseum.

GOOD FOR GRADES: 1 to 5

LIKES: "Good humor, cool songs, and good graphics." ▪**Jeremie**
"I like the characters and the story and Pegasus." ▪**Emily**
"There are songs for kids from the movie *Hercules,* there are games, and there is a story all about the movie." ▪**Rockson**

DISLIKES: "I did not like that it took a while to get into some things." ▪**Amanda**

SOUND ADVICE: "I would have them explain the game before you start, instead of clicking on something to tell you what to do." ▪**Amanda**

FINAL REPORT: Hercules more than lives up to the legend.

SINGSONG SUPERHERO handles Hades and Hydra without missing a note.

Ask Nikki

Dear Nikki,

If you print this letter, I'll do whatever you want. I'll write articles, give you free stuff, free registration to my shareware (when I get it out), free food at my parents' restaurant, lay out your entire magazine every month, anythinggggg. I'll even publish an online version of *MacAddict.* Please. And, if you convince my mom to let me on the Internet, I'll buy five *MacAddict* subscriptions for my friends.

Tino Kaltsas

Tino,

Parents are out for only one thing, and that's money. After years of spending every last dime on "the kids," parents eagerly anticipate the day when their little money sinks turn into loaded ATMs, open for 24-hour unlimited cash withdrawals. Convince your mom that that glorious day will come sooner rather than later if she lets you connect to the Internet. How? Offer to create a Web page advertising your folks' restaurant, give your mom a cut of your shareware revenues, and promise to let her in on the ground floor of your future billion-dollar Internet-based software business. Wave enough greenbacks in front of her, and she'll follow the money all the way to your local ISP. Now, about that free stuff you promised....

—Nikki Echler

(Kids, send your questions to Ask Nikki at *MacAddict,* 150 North Hill Drive, Suite 40, Brisbane, CA 94005. Maybe she'll answer them, maybe she won't.)

Also plays as an audio book on home & car stereos.

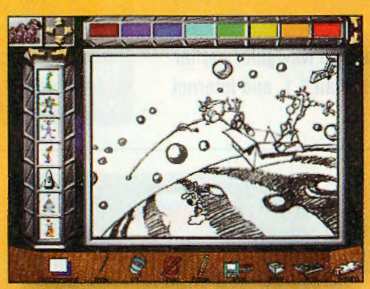
Why settle for the moon, when you can give your child nine planets, Orion's Belt, and a pink poodle?

Introducing Connie & Bonnie's Birthday Blastoff.™ The latest sign of intelligent life.

Show your kids there's more to outer space than zapping brain-sucking aliens. Our new CD-ROM is *Connie & Bonnie's Birthday Blastoff*, an interactive interstellar adventure offering a view of space second only to the front seat of the Discovery shuttle.

A launch pad for learning.

Every page provides new adventures and new things to learn. As Connie and Bonnie speed past Mars, kids discover why it's red, and how much they would weigh standing on its surface. Fun riddles then challenge your kids to apply their newfound knowledge.



Kids can paint using the fun stamps, colors and backgrounds provided.

And to encourage further exploration, each page suggests activities away from the computer, like using a flashlight and an apple to study eclipses.

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how to

how to create a Web animation

Want to make your Web page rock, rattle, and roll? Here's the easy way.

FIND THE FREEWARE mentioned on The Disc.

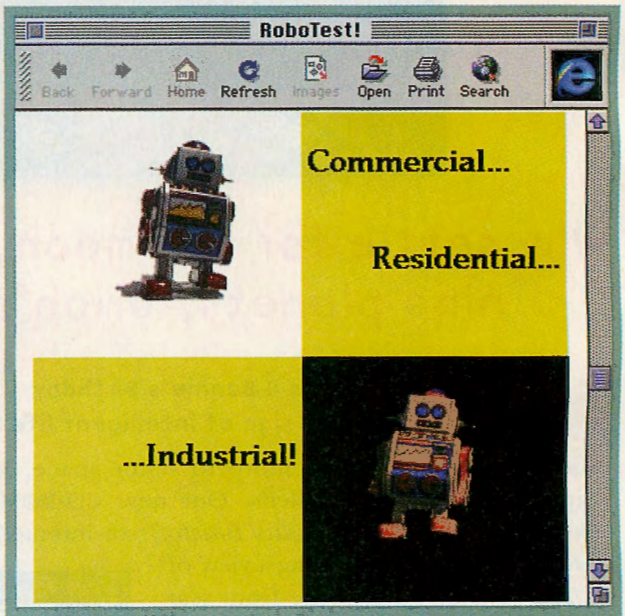
FIND THE FINAL ANIMATION on our Web site.

Animated GIFs are the Web's gift to those who love multimedia but treasure simplicity and compatibility. An animated GIF is nothing more than a series of GIF images rolled into a single GIF (Graphics Interchange Format) file. When a browser sees an animated GIF file, it displays the images in series, creating the animated effect. Animated GIFs are no substitute for a QuickTime movie or Shockwave animation, but they don't require plug-ins, they work with almost all current browsers, and they'll even display a still picture in early browsers that can't play the animation.

Let's assume you're not a brilliant animation artist like some smarty-pants types we know. Don't despair. You can create an attractive animation. That's what why video cameras were invented.

We'll take you step by step through the creation of a short looping animation based on three to five seconds of videotape. With some work on the animation's background, your animated GIF will blend nicely into any page. This month we'll videotape an appropriate subject, pull six to eight frames from the video, and tweak the frames in Adobe Photoshop 4 or MicroFrontier's Color It! Next month we'll turn those frames into a GIF animation in BoxTop Software's GIFmation. —*Joseph O. Holmes*

Color It! 3.2 ($149.95 SRP, MicroFrontier, 800-388-8109, http://www.microfrontier.com) is the Mac cheapskate's secret weapon. It's a terrific low-cost alternative to Adobe Photoshop, it supports lots of filters and selection tools, and it accepts Photoshop plug-ins. The Photoshop instructions apply almost identically to Color It! Use Color It!'s magic wand and marquee tools and the Fill command the same way, with just one exception. Instead of holding down the Option key to subtract selection areas, hold down the Command key. (In versions earlier than 3.0, use the plus (+) and minus (-) buttons on the tool palette instead.)



YOU WON'T SEE THE ANIMATION in this magazine, but you can check out *MacAddict*'s Web site to see Slappy the Robot in its full glory.

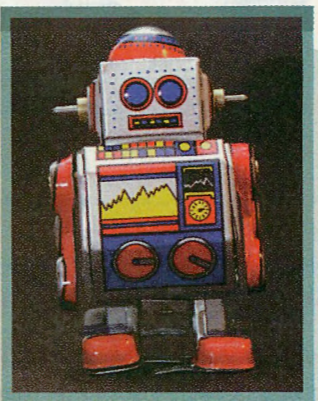
Need to Know

Animated GIFs will not work with versions of Netscape Navigator earlier than 2.0, Microsoft Internet Explorer (Mac) earlier than 2.1, and Internet Explorer (Windows) earlier than 2.0.

STEP 1 The Preliminaries

To create your animation, you need:

- An AV Mac such as the Quadra 660AV or 840AV, or a Power Mac 7500, 7600, 8500, or 8600. Or a Mac equipped with a video capture board from manufacturers such as Truevision and miro.
- Video capture software such as Avid Videoshop, Adobe Premiere, or Apple's Movie Recorder or Video Player.
- Apple's free MoviePlayer application.
- Adobe Photoshop, the less expensive alternative Color It! by MicroFrontier, or a similar graphics application.
- A GIF animation application such as GIFmation ($49, BoxTop Software, 601-324-1800, http://www.boxtopsoft.com) or the freeware GifBuilder by Yves Piguet.



SLAPPY THE ROBOT in a rare candid shot.

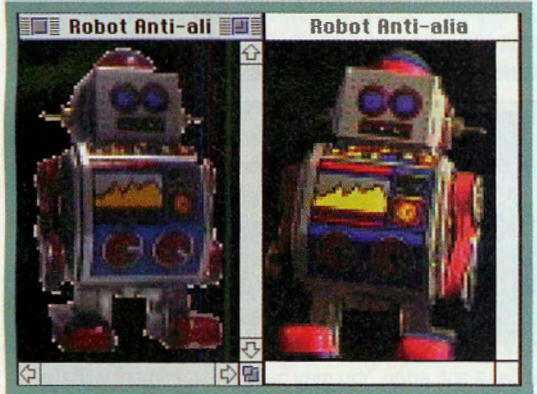
For this tutorial, we scoured New York City looking for a small, easily identifiable object with repeating movement. After rejecting several appliance salesmen, we finally located the right object: a windup toy robot we nicknamed Slappy. It moves, it's colorful, and, to top it off, it's cute as the dickens. For your own experiment, be creative. Consider windup toys, insects, a candle flame or fireplace fire, fish in a tank, or a spinning top. Ideally, the object's movement will repeat so that you can create a looping animation.

Part 1: Videotape Your Subject

In a previous article ("How to Prep a Movie for the Web," Jun/97, p88), we showed you in detail how to videotape for the Web. We suggested that you use a high-quality camera such as a Hi-8, use a tripod when filming, tape closeups, light the scene or object well, avoid busy backgrounds, don't use a lot of special effects, and don't compress your movie until the very end. For more information on how to digitize video, edit the film, compress the video, and create special effects, consult the June article. Then consider these tips specific to your project:

STEP 1 Pick Your Background

Before you do anything else, decide the background color for your GIF. If your page has a white background, videotape your subject on white; if it has a black background, videotape your subject on black. For any other color background, we'll show you next month how to make your animation's background transparent; but even with a transparent background, you must be careful to videotape your subject against a roughly similar background, because anti-aliasing will leave some traces of the color around the edges of your subject.



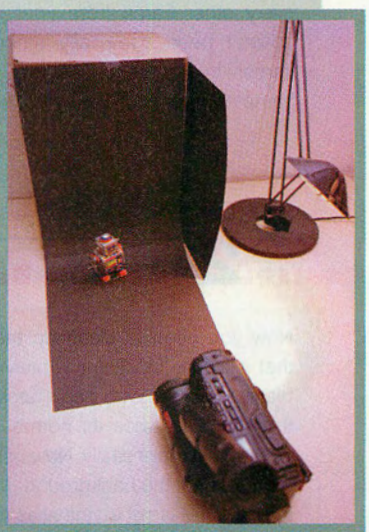
WE VIDEOTAPED SLAPPY on a white background (on the left) and then placed it on a dark page—see the unsightly fringe? On the right, we taped Slappy against a black background, which blends nicely with black or any dark page.

STEP 2 Build Your Studio

Our Poor-Mac's Home Video Studio won't cost you a cent, assuming you already own a video camera. First, create a backdrop for your movie. Ideally, you want to use a single, pure backdrop color so you can later select it and replace it with another color in Photoshop. If you're shooting on a black or dark backdrop, place your subject against the appropriate colored construction paper or matte-finish surface. Illuminate the subject with a high-intensity desk lamp, and shield one side to keep the light off the backdrop so that it remains nice and black.

If you're shooting against a white or light backdrop, use sunlight. Don't worry about the shadow—you're going to keep the shadow in the animation. If you'd rather avoid shadows, try letting the sunlight pass through some kind of diffuser, such as a large white sheet of thin paper.

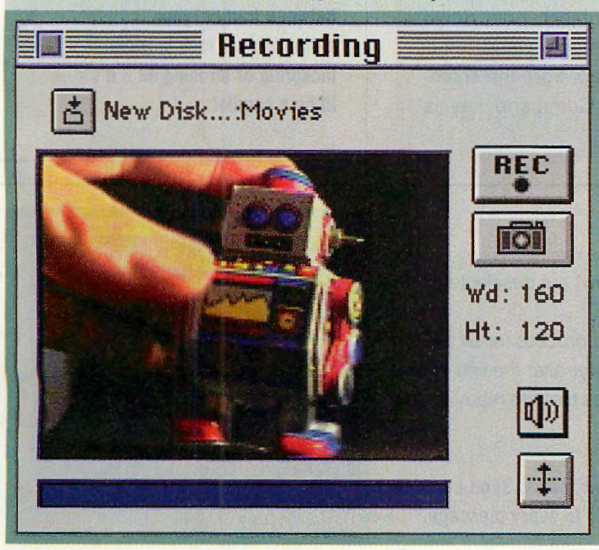
When you videotape your subject, fill the screen with a closeup. You want to capture the most detail and the best colors in the best resolution possible. Shoot two or three minutes so you'll have lots of material from which to choose. When you've finished, keep your mini studio set up so that if your first attempt doesn't produce what you want, you can dash over and try it all again.



IT'S NOT FANCY, BUT IT DOES THE TRICK. Our homemade studio has adequate lighting and a solid-color background.

STEP 3 Capture!

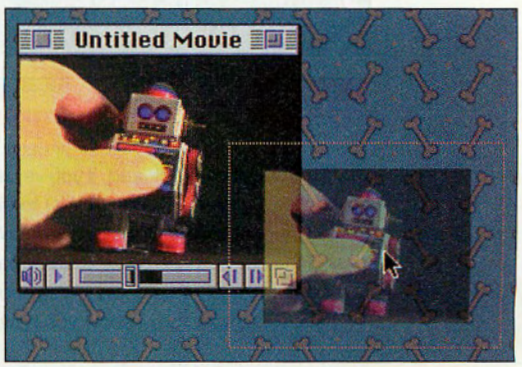
Plug your camcorder into your AV Mac or video capture board, and prepare to digitize your videotape onto your hard drive with a tool such as Avid Videoshop or Apple's Movie Recorder. Record the segment onto your hard drive, then use your video editing software to play through your movie to locate the three- to five-second segment that will become your looping animation. Turn that segment into a movie clipping.



NOW IT'S TIME to transfer your movie from videotape to your Mac's hard drive.

Hot Tip:

To create a short clip in Apple's MoviePlayer, hold down the Shift key as you step a frame at a time to select part of the movie. Then just click on the movie itself and drag it onto your desktop to create a QuickTime movie clipping.



MOVIEPLAYER MAKES a perfectly fine simple QuickTime editor.

how to

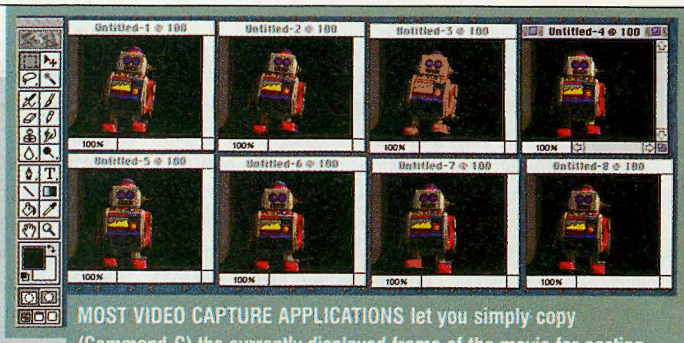
Part 2: Tweak the Pictures in Photoshop

You can import your QuickTime movie right into a tool such as BoxTop Software's GIFmation, but its graphics tools aren't as powerful as Photoshop's. Because we're going to create only six or eight frames, it's not a serious drag to tweak one frame at a time, so let's import the frames into Photoshop, tweak them there, and then import them all into GIFmation.

Hot Tip:
You can use this process to erase unwanted parts of the image. For example, Slappy the Robot has little rods on its feet for balance. We erased them.

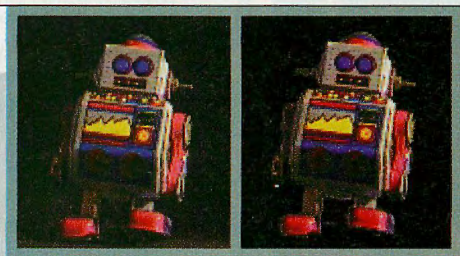
STEP 1 Copy the Frames to Photoshop

In your video software, copy the first frame, switch to Photoshop, create a new window with Command-N, and paste the picture into the blank window. Repeat for all six to eight frames. You'll probably find that you can copy every other frame from your movie—an animated GIF doesn't need especially smooth animation. Save the frames in Photoshop as PICT files, titling each with a frame number so it's easy to keep them in the right order.



MOST VIDEO CAPTURE APPLICATIONS let you simply copy (Command-C) the currently displayed frame of the movie for pasting into Photoshop. If you should stumble across an application that doesn't allow this, open the movie in Apple's free MoviePlayer, which does.

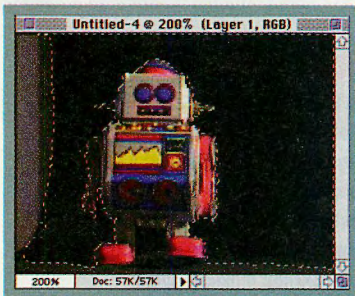
STEP 2 Select the Background



BEFORE AND AFTER filling the background: The difference is subtle but critical. Unless the background is a pure solid color, you won't be able to blend the GIF into your page's background or turn the background transparent.

Now you need to clean up the background so that it's pure black (or whatever color) and will blend into your Web page background. Blow up the image to twice its normal size so you can work with it more easily. Now use the magic wand tool to select the background. Make sure that the magic wand is set to anti-alias (in the magic wand options palette) so that you get a soft edge. You may have to experiment with the tool's "tolerance" setting to get the best results—10 to 30 is probably a good starting point.

STEP 3 Tweak the Selection



ADD TO your selection by holding down the Shift key while using the magic wand.

There almost certainly will be parts of the background that the magic wand tool will miss, so use the magic wand while holding down the Shift key to add to the selection. You also can use the Shift key with the marquee and lasso tools to add to the selection. Similarly, if the magic wand has selected some of your subject, hold down the Option key and use the magic wand, marquee, and lasso tools to *subtract* from the selection. (In Photoshop 3.x, the Command key is used for subtracting.)

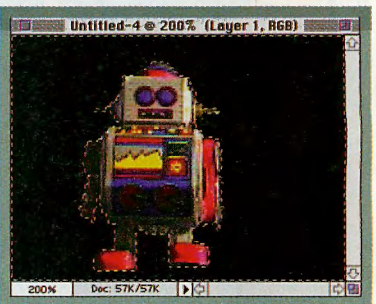
Warning:
Don't try to adjust the contrast, brightness, or color of your frames unless you know how to save the settings so that they can be applied perfectly uniformly across all the frames. If your settings change between frames, your animation will look horrible, flickering or strobing as if it's lit by a candle!

STEP 4 Fill the Background

When only the object (and, if you've used a white background, its shadow) are deselected, use the Fill command (Option-Delete) to fill the selection with black (or white).

Congratulations, you now may save your very first frame. Repeat the process for all frames until they all have the same uniform background. Don't worry, it goes faster after the first frame. After a half hour or so of work, you should have a set of six or eight frames that are ready to animate. Next month we'll show you how to import these into GIFmation.

Joseph O. Holmes would love to hear your tips and questions on Webmaster topics. Send email to professor.web@pobox.com, but please remember, he can't personally reply to every message.



HERE'S THE FINAL filled background.

TOP 10 WAYS TO KNOW YOU'RE A Mac Addict

10. Your 486 works great—as a flower press

9. You constantly double-click the bar of soap in the shower

8. You talk in a wild, animated manner about new "extensions" and "peripherals"

7. You can't resist the urge to use "Command Y" to eject your Pop-Tarts from the toaster

6. You wish this was a "Top Five" list so you could get back to your Mac sooner

5. You read "Inside Macintosh" to your three-year old Mac whiz instead of Dr. Seuss

4. You turn on the TV and are concerned when you don't see a smiling icon

3. You paid $150 for an old Homestead High School yearbook picturing Stephen Wozniak

2. You are always telling people you can quit using your Mac anytime you want to...

And The #1 Way To Know You're a Mac Addict?
THERE'S A PUBLICATION CALLED MACADDICT AND YOU MUST HAVE IT!

Call 1-800-666-6889 to get your FREE issue with disc of *MacAddict* today! If you're pleased send just $24.95 for 11 more issues and discs (12 in all)—a savings of over 65% off the cover price. And don't forget to check out our equally addicting Web site at:

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magine
new way of publishing

ask us your questions

We answer your technical questions, no matter how simple or complex.

Q I want to upgrade my Mac from System 7.0.1 to Mac OS 8. Can I do this without going through the versions of the operating system that are in between?

A Sure. The difference between upgrades and updates confuses many people. Apple charges for major upgrades, such as Mac OS 8, because it includes everything you need to install on top of previous versions of the OS, provided that your Mac meets the hardware requirements. The installer removes or replaces old files in the System Folder and installs new stuff where it belongs. Updates, however, include only bug fixes and new versions of some System components. Because they build on the base of the previous Mac OS, updates are given away on Apple's Web site and often are on the *MacAddict* CD.

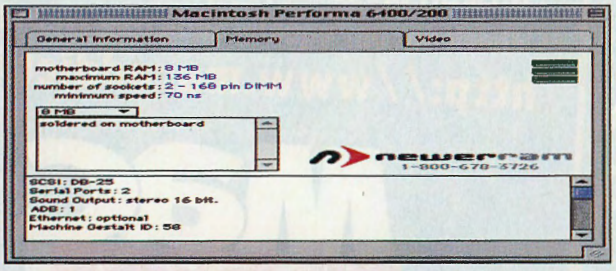
FIND GURU, MOVIEPLAYER, and CDToAIFF on The Disc.

Q Why after rebuilding my desktop with extensions turned off does the Mac then rebuild the desktop again when I let the extensions load normally?

A The Mac OS Easy Open control panel (previously called Macintosh Easy Open) is the cause of this strange behavior. It relies on the desktop file to determine which applications you have on your hard drive. If you rebuild the desktop (hold down Command-Option when the Finder first appears) when Mac OS Easy Open is disabled, it gets confused the next time it loads, so it forces the Mac to rebuild the desktop again. To avoid this annoyance during future rebuilds, instead of holding down Shift at startup to turn off all extensions, use the Extensions Manager control panel to disable all extensions and control panels except Mac OS Easy Open.

Q I have a Performa 6400. Can I buy one memory module now and add another later, or must I buy two same-size modules and install them together?

A Whenever I'm asked a question about Mac memory, I turn to GURU, a freeware program from Newer Technology (800-678-3726 or 316-943-0222, http://www.newertech.com). In addition to covering memory issues in depth, GURU has lots of technical information about every Mac and clone ever made. According to GURU, the Performa 6400 has 8MB of memory on its motherboard, plus two 168-pin DIMM slots for 70-nanosecond memory. There are only two slots, so use them wisely. Once they're filled, increasing your Mac's memory means replacing an existing module with a larger one, leaving you with an extra module.

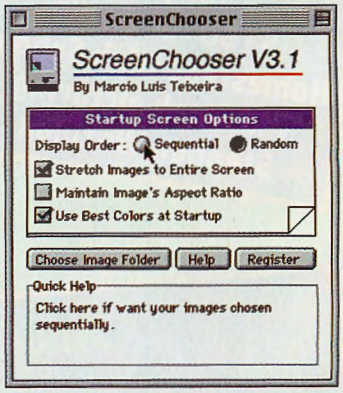


THE DEFINITIVE GUIDE TO MAC MEMORY, Newer Technology's freeware GURU includes a lot of other technical information, too.

The reason why someone might want to install pairs of like-size modules in a newer Mac is to take advantage of the interleaving feature available on some models (if GURU displays a Configure Memory button in a particular Mac's window, that model supports memory interleaving). Basically, if you install memory modules in pairs in matching slots, interleaving takes place automatically, and you may see an overall speed increase of 5 to 15 percent. Unfortunately, the Performa 6400 doesn't support memory interleaving, so you can install modules one at a time if you wish.

Q Is there a way to randomize my StartupScreen?

A One of the little-known features of the Mac is its ability to replace the standard "Welcome to Macintosh" startup greeting with a custom picture, be it a bathing beauty, corporate logo, or warning for others to keep their paws off your computer. To take advantage of this feature, you must save your picture in the special StartupScreen file format, name the file StartupScreen, and place it in your System Folder (most graphics programs offer the StartupScreen, or PICT Resource, format as an option if you choose Save As or Export from the File menu). The next time your Mac starts up, it displays the StartupScreen as the extensions load. The only problem is that looking at the same picture day in and day out is pretty boring. Fortunately, with Marcio Luis Teixeira's shareware control panel ScreenChooser, your Mac can sequentially or randomly select from a folder full of different StartupScreens. ScreenChooser also allows you to display pictures, not just patterns, on the Finder's desktop, much like Mac OS 8's Desktop Pictures control panel, but it works under System 7. (Incidentally, if you drag a folder of images onto a monitor in the Desktop Pictures control panel, the Mac picks at random from that folder at startup.)

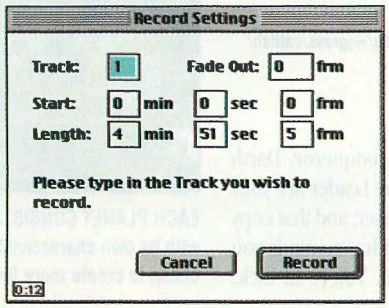


SCREENCHOOSER IS A GREAT SHAREWARE PROGRAM for randomizing StartupScreens as well as desktop pictures.

Q **Is there a way to record audio tracks from a CD?**

A If you have Apple's MoviePlayer and QuickTime 1.5 or later installed on your Mac, you already have everything you need. Insert the audio CD into your drive, then launch MoviePlayer and choose Open from the File menu. Select a track from the CD, click Convert, then choose a location on your hard drive to save the audio track as a movie file (you'll need more than a megabyte of disk space for each minute of audio). Once saved as a movie file, you can play the track using any QuickTime player, or use Scott Lindsey's freeware Movie2Snd to convert the soundtrack into a System 7 double-clickable sound file.

Another alternative is to use Tim Kask's shareware utility CDToAIFF. Like MoviePlayer, this allows you to extract audio tracks from CDs, but it has the added benefit of being able to specify the track, start time, length of recording, and duration of a fade. Also, it automatically generates AIFF sound files, which can be used by a wide variety of sound-editing programs.



EXTRACT AUDIO TRACKS from CDs with CDToAIFF. It offers more features than converting with MoviePlayer.

Q **I want to install an internal hard disk in my Performa 6400's empty tower bay. However, I can't figure out how to open the case. I called the folks at Apple, but they insisted that I pay an Apple authorized dealer to perform the installation. Can you help me get the covers off the 6400?**

A Opening a Performa or Power Mac 6400 isn't easy, but it can be done. First, remove the single screw on the back that holds down the top cover. Now face the front of the 6400 and feel around on the bottom lip of the front cover about an inch to each side of the model name face plate. You should feel two plastic tabs that you can press up. While pressing these up with your middle fingers, push with your thumbs against the main body of the Mac. You need to exert a lot of force to pry the bottom of the front cover toward you and slightly up. It may feel like it doesn't want to give, but it will. After removing the front cover, you must remove the drive bay cover. Grasping the sides with your fingertips, push on its face with your thumbs to flex the piece enough to pry it off. Both the drive bay cover and front cover are held on by plastic tabs only. There are no hidden screws; just exert enough force to pop the tabs out of their latches. To finish, press down on the top cover and push really hard to slide it backward and off. This step needs to be done last, as the top cover latches onto the drive bay cover. With all the covers removed, it should be easy to connect your internal drive to the prewired cables, then reverse these steps to put the covers back on.

Q **I've entered titles and playlists for about a hundred audio CDs in the AppleCD Audio Player application. The last time I did a clean install of the Mac OS, I backed up the AppleCD Audio Player Prefs file thinking that this is where the program information was stored. But I lost all my hard work! Where is this information stored?**

Netscape Navigator Easter Eggs

In the Location field, where you usually enter URLs, type about:mozilla or about:plugins, and press Enter. You'll be surprised by what you see.

A The first time you insert an audio CD into the Mac, it's an unknown quantity, so AppleCD Audio Player displays its title as Audio CD and the song names as Track 1, Track 2, and so on. However, if you enter the title and song names, this information is saved in the CD Remote Programs file inside your Preferences folder in the System Folder. The next time you insert this disc, AppleCD Audio Player shows the correct info instead of the defaults. Before upgrading the Mac OS, back up the CD Remote Programs file. Upgrade and then replace the "new" file with your backup, which contains your disc information.

IF YOU ENTER SONG NAME info in the AppleCD Audio Player, it's stored in the CD Remote Programs file.

Several great freeware and shareware utilities make the most of your CD Remote Programs file. Audio CD Mover, CD Coyote, and CD-Namer all let you display, import, export, and merge CD Remote Program files, allowing you to build a large database without entering the info yourself. This made me think that it would be great if the Mac automatically recognized any audio disc inserted. Unfortunately, CD Remote Program can hold info for only 1,300 discs. There is a free, comprehensive database called CDDB (http://www.cddb.com) with 75,000 entries that can be accessed via the Net or downloaded to your computer. Sounds great? It is, but currently there's no Mac software that can use this data. All's not lost, however, as Apple engineer Peter Bierman is working on a similar project called Dynamic Internet Shared CD Overviews, or DISCO (http://www.spies.com/~lunatic/disco/i2.html). The beta DISCO database has less than 10,000 entries, but it's sure to grow quickly when released this fall.

Q **Is there such a thing as having too many extensions installed? If so, what is the result of extension overload?**

A Extensions are a great way to add functionality to your Mac. I have a slew of them in my System Folder that I find indispensable. But, of course, you can take this too far. If two or more extensions don't agree with one another, your Mac may begin acting strangely or crashing. Conflict Catcher from Casady & Greene (408-484-9228, http://www.casadyg.com) is a great utility for managing startup items and tracking down misbehaving extensions. Even if everything behaves, there are other downsides to using too many extensions. Extensions require disk space to store and plenty of memory when loaded, so if either is at a premium, you should disable or delete some extensions. Finally, there is a trade-off between added functionality and diminished responsiveness—many extensions slow down operations on the Mac.

Owen W. Linzmayer (askaddict@aol.com) is the author of *The Mac Bathroom Reader*. Please send tech questions or tips via email or c/o *MacAddict*, 150 North Hill Drive, Suite 40, Brisbane, CA 94005.

games

powerplay

Puzzles for PowerBooks, Carmageddon creators, and C & C strategems.

Shareware Recon

Snood 2.0

COMPANY: David Dobson

CONTACT: http://www-personal.umich.edu/~dob/snood.html

FIND GAME DEMOS on The Disc.

Snood 2.0 is the sequel to a simple but infinitely addictive game that came out about a year ago. The first release proved to be so popular in some circles that some universities banned the game from tech support computers because the staff was too busy playing to help customers. The second release may well be one of the five most dangerous games in existence.

THOSE HAPPY FACES will drop all blocks under them, getting beaucoup points.

The premise is simple. Take eight types of faces and build a wall out of them. Call them snoods. Then put a snood launcher at the bottom and tell the player to get rid of all the snoods before the wall comes crushing down. Three of the same snood types will disappear, but getting rid of more will get you additional points. However, dropping extra snoods earns the most points.

EACH OF THE 50 LEVELS has a simple solution, but you've got to have a steady mouse hand.

Besides the regular game, there are 50 carefully designed levels available in the new puzzle mode. If you get tired of those, the level editor lets you create as many as you want. At $10 and a measly 1.2MB of hard disk space, Snood 2.0 is a perfect game for PowerBook owners who are tired of Tetris or Ultimate Solitaire. —*Jeff Chen*

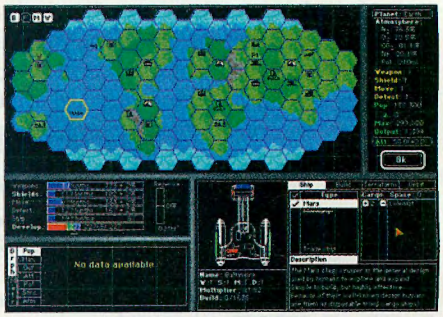
Preview

Starbound II

COMPANY: Catfish Software

CONTACT: http://anytime.cs.umass.edu/~jgrass/catfish/sbii/main.html

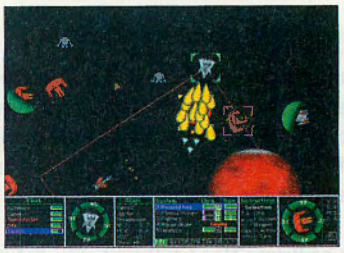
RELEASE DATE: TBA



EACH PLANET CONSISTS of 127 hex grids, each with its own characteristics. You can terraform the ocean to create more living space, but it'll cost you.

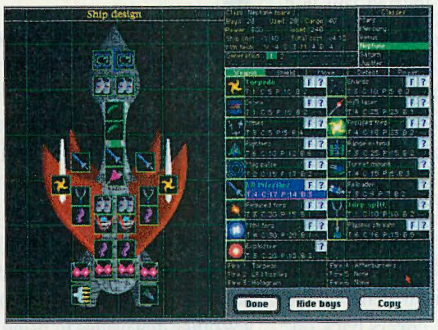
You're a would-be galactic conqueror. Darth Vader and the Cylon Supreme Leader are your role models. But you're a Mac user, and that copy of Master of Orion II that Darth has reminds you too much of Microsoft Word 6. You're in luck. Get ready for Starbound II.

Jonathan Grass, the man behind Catfish Software, is busy turning the original Starbound into a game to rival THQ's Pax Imperia II in complexity. You will control an empire on every level, from guiding war fleets to terraforming the lichen fields of planet Sirius. Luckily, the simple interface makes all the information you need only a mouse click or two away.



EARTH ATTACKS! The insectlike Ceptri's superior shields can't hold against those bloodthirsty Terrans.

Choose any of six races, each with special abilities and weaknesses. Humans, for example, are strong in weapons technology but produce more pollution than any other race, while YXaWks reproduce like randy rabbits but are dumber than doorknobs when it comes to technology.



EIGHTY SHIP SYSTEMS can be developed, with higher tech levels increasing efficiency.

Each planet's success depends on 14 different variables, including education and real estate. Balancing profitability and happiness depends on the facilities you build on each planet. Concentrate on universities, and your citizens will find that a book is a lousy defense against a cyborg's laser.

Treaties are fine for the economy and all, but sometimes you just want to blow the hell out of your neighbors. That's where technology comes in. Starbound II minimizes the types of technology to keep the game focused. You can research four main types: weapons, shields, propulsion, sensors. Build your ships carefully, because the difference between a regular torpedo and a focused one makes all the difference in the world.

Unique to Starbound II is the ship-to-ship tactical combat system. If a ship wins enough battles, then the crew gains experience, which can compensate for having older technology. If you keep refitting the ship, then you can bet it'll last longer than seven movies.

For all the features already in the game, the author intends to add many more. The current version floating around the Internet was designed as a preview, with only basic features implemented. Enemy AI will appear in preview five, but diplomacy, networking, and spacial anomalies won't be appearing anytime soon. When they do, though, Delta Tao Software's Spaceward Ho! will face serious competition for the best galaxy conquest game on the Mac. —*Jeff Chen*

THE ONLY THING DEADLIER than this gridlock is the streets of L.A., and that's only because they've got guns.

OH, THAT'S GOTTA HURT. Mangling pedestrians not only helps you relieve tension, but their insurance pays *you*.

CARMAGEDDON CATERS TO THE SAME CROWD as Duke Nukem 3D, so don't expect any high falutin' ideals. Just clean and gory racing.

Interview

Carmageddon

COMPANY: MacPlay
CONTACT: 800-4MACPLAY, http://www.macplay.com
RELEASE DATE: Fourth-quarter '97; available by direct sales only

You know them. Pedestrians. The punk in the baggy pants and the old man in tight checkered ones—they walk halfway into the intersection and stare at you, daring you to just try something. You want to run them over so bad you can taste it, but you can't because they've got a stupid thing called the right of way.

Carmageddon is the driving game for all frustrated drivers. It's your job to do what you've always wanted to do to those peds, in the most bloody and humiliating ways possible. To find out more about this auto carnage, we talked to the folks at UK-based Stainless Software. —*Jeff Chen*

MA: Where did you get the idea for Carmageddon?

SS: Our original concept for the game was a Destruction Derby-type game but with the most accurate 3D physics of any game, plus the feedback of dynamic damage to the cars during collisions. We sold the idea to SCI with a playable demo, a simple oval track with four cars that crumpled during impact.

Later on, the game grew out of a desire to create the kind of driving game we'd always wanted to play—in which you could turn around straight off the start grid and give the other cars a damn good twatting, plus get rewarded for it. The pedestrian-killing element developed when we were looking at the possibility of a Death Race 2000 license, and it was so much fun to do that it stayed in. Plowing through crowds is a particularly pleasurable pastime.

MA: Is Carmageddon strictly a racing game, or are there multiple ways to win?

SS: The *LAST* thing we wanted Carma to be was a racing game. Only the terminally sad win by racing. The best ways to win are to either wreck all your opponents' cars or kill all pedestrians.

MA: What's the coolest weapon?

SS: The game doesn't really have "weapons" as such, because the idea of a ranged weapon detracts from the use of your car as the weapon, but in the range of power-ups that can be picked up, Solid Granite Car turns your car into a very effective 50-ton weapon against your opponents for its duration, and the Electro-Bastard Ray fries all pedestrians within a short radius of your car.

MA: Why is Stainless Software making a Mac version? Any improvements?

SS: The game's code was developed to a large extent on the Mac and is almost completely platform independent. Therefore, the Mac version was an obvious addition, particularly as decent Mac games are few and far between.

MA: What do you think of the Mac game market?

SS: It's highly undersupported and, therefore, offers huge potential to those publishers and developers willing to port their product to it.

MA: Will the TechWorks 3Dfx card work with Carmageddon Mac?

SS: Not at the moment, but 3Dfx on PC is supported, so getting the Mac version working is a distinct possibility.

MA: What would you improve if you had a chance?

SS: We all wanted the game to run faster in hi-res, and the 3Dfx version addressed that problem. There are lots of features and ideas that are still on our Carmageddon wish list. The thing about wish lists is that they make great starting points for a sequel....

Strategy Square

Command & Conquer

COMPANY: Westwood Studios
CONTACT: 800-874-4607, http://www.westwood.com

URBAN DEVELOPMENT: Nod uses the sandbags to build next to a guard tower.

PLAY DIRTY, PLAY CHEAP Ten infantry men can take down small vehicles like piranhas on a hippo, and they're cheaper to replace than a Humm-Vee or a recon bike. The same follows for buggies and HVs against tanks.

JUST FOR GDI Consider using the two strategies above with grenadiers instead of infantry. For $60 more, you get a faster, more powerful unit. In groups, they're great against tanks, walls, and buildings.

ATTACK HARVESTERS It might seem unethical, but cut off the money, and the enemy can't build troops. Watch the silos, though. If your opponent has enough reserves, that counterattack's going to hurt.

A SHARK PACK of recon bikes sweeps through GDI town. Only guard tower guns can take 'em down.

BUILD THE BASE OUT In theory, you can build only right next to your buildings. Use sandbags and other wall materials to build feelers into unoccupied territory, then build your turrets or guard towers. This way, you can build defensive layers. —*Jeff Chen*

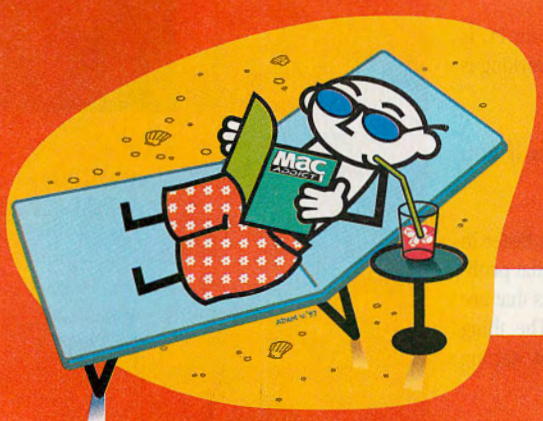
Max's Guide to Buying Mail Orde

You're at home, you're a Mac fanatic, so of course you're reading your favorite magazine, ***MacAddict.*** Your friends insist you should go out more and get a life, but you would rather sit in your comfy armchair and read about the newest and coolest Mac products.

As you're reading, you get an idea (you know that you have an idea because there is a lightbulb above your head). You decide that it's time to buy a new monitor. ***MacAddict*** has a great selection of mail-order ads, so you decide to browse the mail-order section to find the best price. You let your fingers do the walking and you're ready to place an order.

Now here's the tricky part. Are you paying attention? You pick up the phone, dial the 800 number in the ad, place your order, and you mention ***MacAddict.***

That's right, make sure that you mention ***MacAddict*** whenever you buy mail order. Why? Because Max said to, that's why. After all, it is Max's guide to buying mail order and he gets to make the rules.



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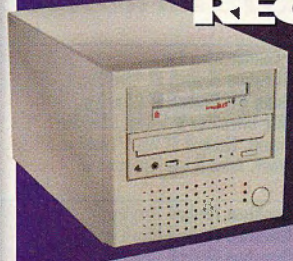

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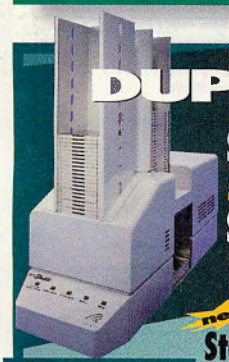

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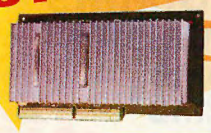

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Timeslips
- Timeslips 4.0..... $279.

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Adobe Systems
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Astound
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Avian System
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Deneba
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- Claris Works Internet Edition (includes Claris homepage & Apple internet connection kit)..... $99.

Farallon Communications
- Timbuktu Pro 3.0..... $125.

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StarNine tech.
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- GoLive Cyber Studio(Web Site des./build.).. $289.

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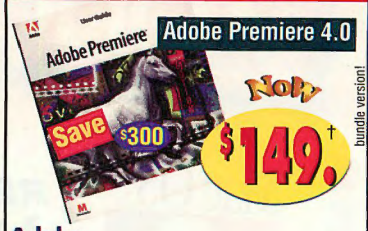

Adobe
- Persuasion 4.0 (full version)..... $299.

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mFactory
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- HoloDozo 1.0 (Adobe Premiere plug-in)..... $129.

NewTek
- LightWave 3D 5.0 (Pro-Level animation)... $1299.

Pixélan Soft
- Video SpiceRack 1.0..... $159.

The Valis Group
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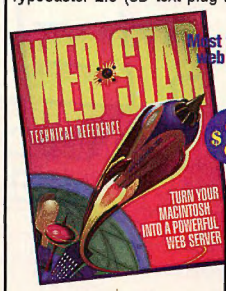

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Quantum	TM2110A	11 Ms	4500	EIDE-4	128k	$209	$259
Quantum	TM2110S	11 Ms	4500	Ultra SCSI-3	128k	$279	$329
Quantum	AT32150S	8 Ms	7200	Fast SCSI-2	1024k	$429	$479
Seagate	52160N	11 Ms	5400	Ultra SCSI-3	128k	$329	$379
3.2 GB							
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4.3 GB							
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Fujitsu	M2954SYU	8 Ms	7300	Ultra SCSI-3	512k	$769	$819
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Quantum	AL39100SW	8 Ms	7200	Ultra Wide SCSI-3	1024k	$1329	$1389
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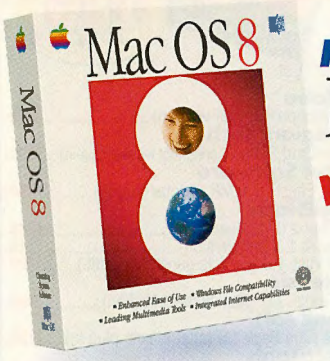

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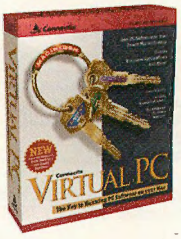

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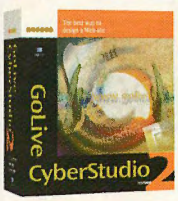

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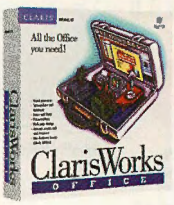

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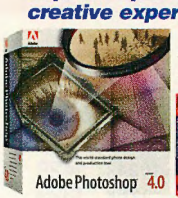

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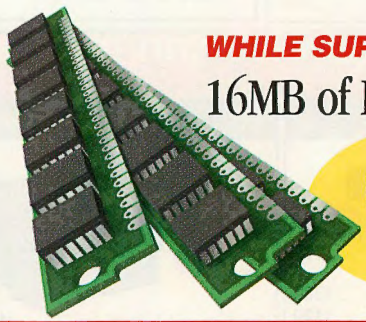

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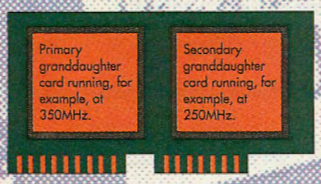

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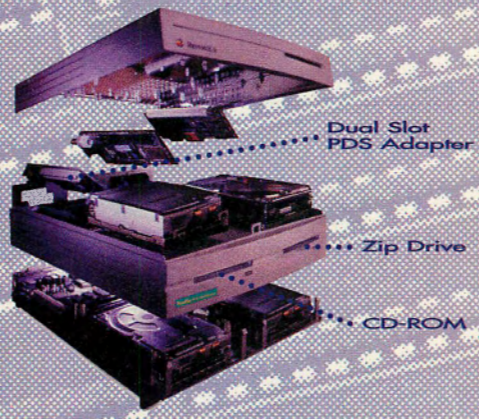

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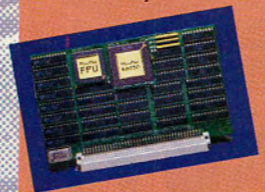

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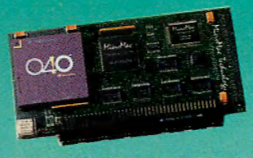

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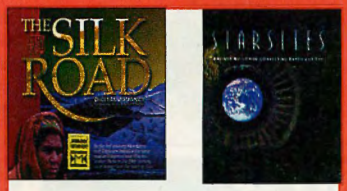

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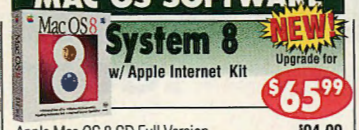

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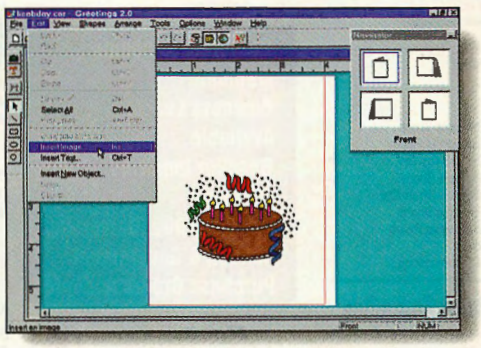

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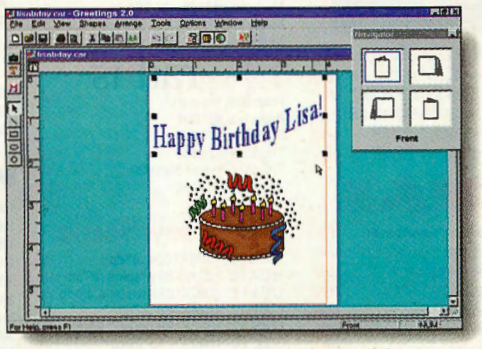

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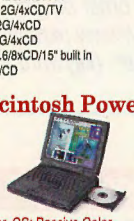

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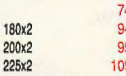

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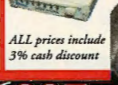

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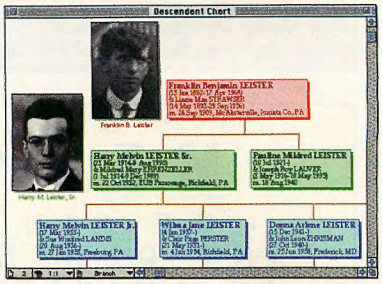

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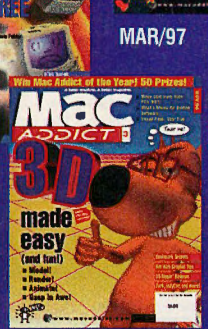

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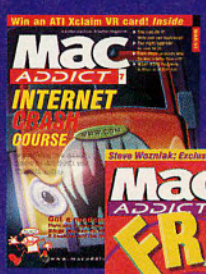

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Micromarketing

"She can't drive, she can't stay out late, but she's got dollars to spend. She's the untapped market," said Laura Groppe, president of the software company Girl Games, on her company's leading-edge strategy to market games directly toward affluent pre, pre, prepubescent young girls, like, say, Bill Gates' daughter.

BODY SNATCHERS

The men of Mac Sale International, an Arizona-based company that sells new, refurbished, and used Macs, are also available for birthdays, wedding showers, and ladies' nights out. Get a sight of their briefs, ummm, we mean take a brief look at their site at http://www.macsaleint.com/aboutms.html.

Headline of the Year

"Apple Retains Heidrick & Struggles for its Search of a New CEO." Sometimes one headline is worth a thousand words. Or at least a few good laughs.

TOUGH TALK

"Mike is a Loser Bloated Pasty Dork Boy," according to a demonstration hosted by Power Computing's official Fast Talker, Mike Rosenfelt. The message, which scrolled across a monitor connected to one of the company's new machines here at the *MacAddict* offices, started a hot debate over whether to hyphenate or innercap the term, "Dork Boy." The debate rages on as Power President Joel Kocher continues to incite crowds of mild-mannered grammarians. Apple officials refuse to comment.

Male Chauvinist Dig

"He was clean-shaven, man and freakin' driven. It was like when you find your girlfriend sleeping around and you want to take her out to dinner, clean her up, and then dump her," Richard Doherty, director of the Envisioneering Group, excitedly describing Steve Jobs to a member of the press at the Boston Macworld Expo last August. Richard, we sincerely hope your girlfriend is reading this right now.

IT'S CALLED A "LAPTOP," SENATOR

"What will be the next step if we take this? I would be a bit irritable, I think, if I looked around and saw someone sitting beside me, typing on this thing," said Sen. Robert Byrd, (D-W.Va), in a *New York Times* article on the debate over whether or not laptops should be allowed on the Senate floor. We've heard rumors that Sen. Byrd also refuses to travel on those big metal things with wings, and reportedly gets angry when listening to that talking box found in his horseless carriage.

REJECTED MAC OS 8 LOGOS

Doodle by Mark Simmons

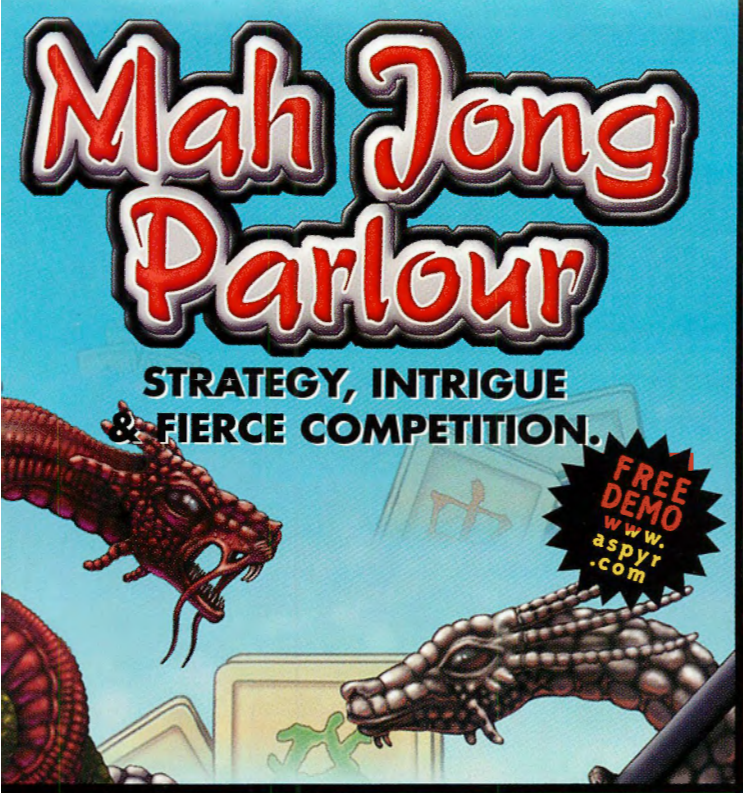
What's Our Motto-vation?

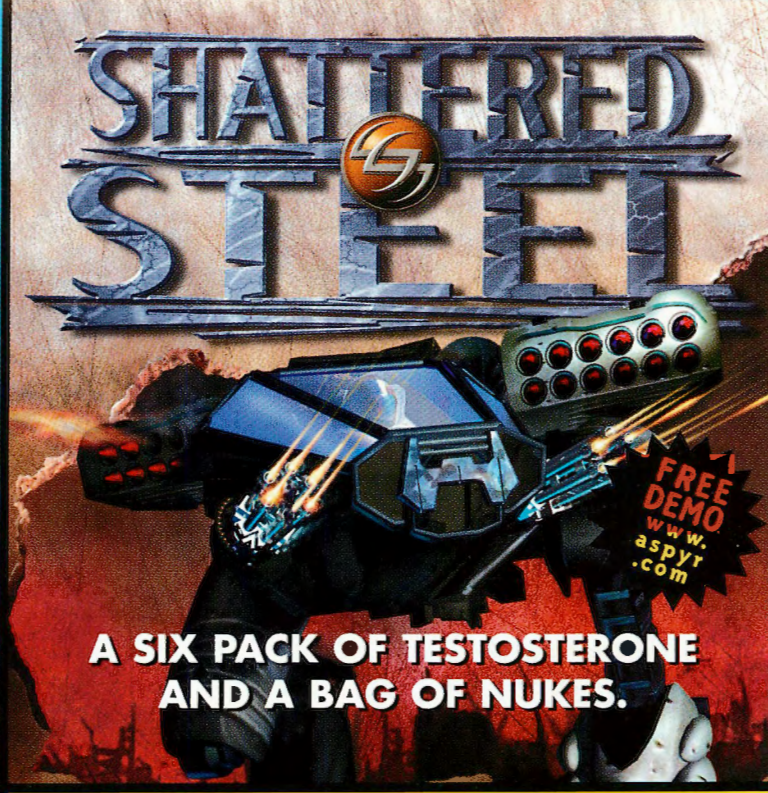
"Think Different," Apple's succinct new slogan, came about only after a slew of less catchy taglines were deemed unworthy. Here are just a few of the ideas that were rejected:

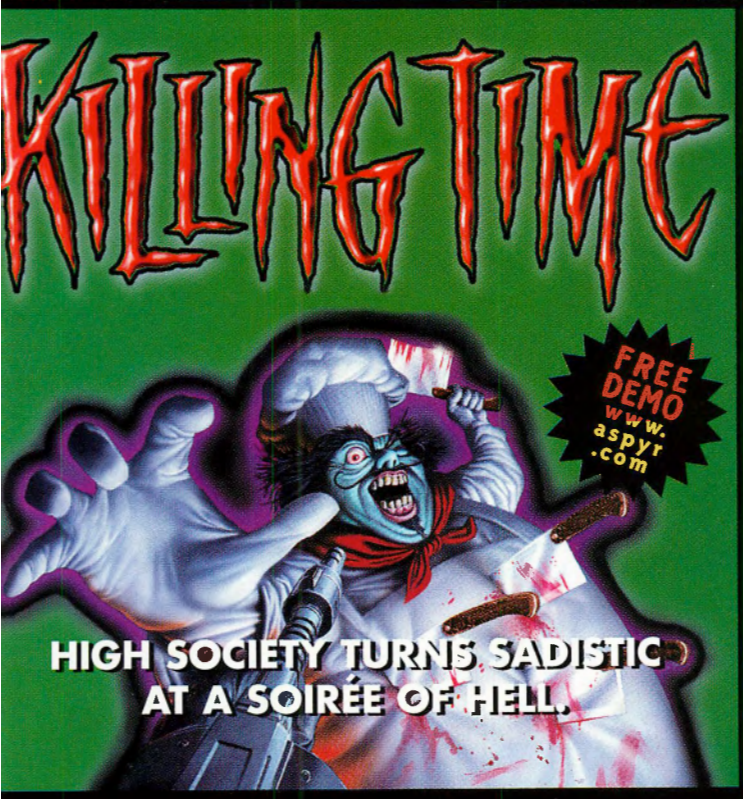
"Everything Else Just Sucks."
"Think Like You've Got a Brain in That Head."
"Think it Over."
"We're Ba-a-a-a-ck."
"Work Smartly. Not Hardly."
"Walk Like an Egyptian."
"We Must, We Must, We Must Increase Your Trust."

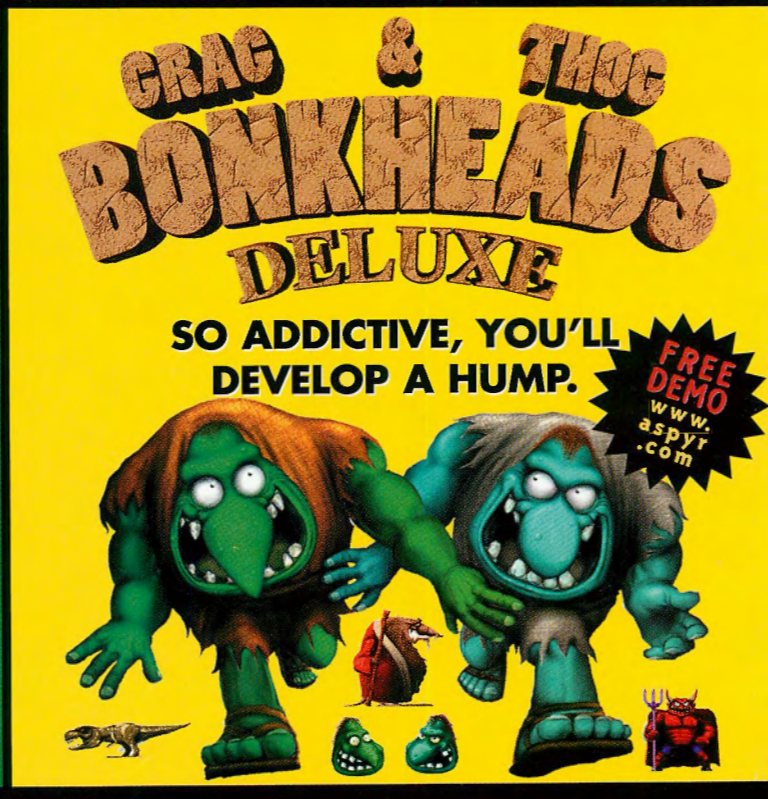
Cut Off

"Around Apple they still believe that no one ever got a really great idea while wearing a suit and tie," said former Apple CEO Dr. Gilbert Amelio at a San Francisco luncheon in late July. Unfortunately Amelio didn't get to finish his sentence which originally ended, ...while wearing a suit and tie, flying a private jet, bleeding the company dry, holing up in a plush, new office, and killing off cool technology."









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